Systematic Assessment of Rehabilitation Situation in Lao People's Democratic Republic (Lao PDR)

Photo credit: Humanity & Inclusion (HI)

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WORLD EDUCATION

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ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ

ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນະຖາວອນ

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ກະຊວງສາທາລະນະສຸກ

ກົມປິ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ: ເລກທີ 1333 / ກປຟ

ນະຄອນຫຼວງວຽງຈັນ, ວັນທີ 30 MAY 2018

<u>ໃບສະເໜີ</u>

ຮຽນ: ທ່ານຫົວໜ້າ ອົງການສຶກສາໂລກ ປະຈຳ ສປປ ລາວ

ອີງຕາມ ຂໍ້ຕົກລົງລັດຖະມົນຕີກະຊວງສາທາລະນະສຸກ ເລກທີ 2029/ສທ ລົງວັນທີ 20 ກັນຍາ 2017 ວ່າດ້ວຍການຈັດຕັ້ງ ແລະ ການເຄື່ອນໄຫວຂອງກົມປິ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ.

ອີງຕາມ ໜັງສືສະເໜີ ຂອງອົງການສຶກສາໂລກ ເລກທີ WEC/L 077.05.18 ,ລົງວັນທີ 11 ພຶດສະພາ 2018

ກົມປິ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ ຂໍແຈ້ງໃຫ້ທ່ານຊາບວ່າ ຜ່ານການປຶກສາຫາລື ແລະ ການຄົ້ນຄ້ວາທາງດ້ານວິຊາການ ກິດຈະກຳ ທີ່ທ່ານສະເໜີ ຂໍເລີ່ມປະຕິບັດກ່ອນ ໄດ້ຮັບອະນຸມັດ ໂຄງການ ເຫັນວ່າມີຄວາມຈຳເປັນ ທີ່ຈະຕ້ອງໄດ້ປະຕິບັດກ່ອນ ເພື່ອໃຫ້ໄດ້ຂໍ້ມູນ ມາປະກອບໃສ່ ໃນການຂຽນ ແຜນຂອງໂຄງການ ໂອກາດ.

ດັ່ງນັ້ນ, ຈຶ່ງ ເຫັນດີຕາມການສະເໜີ ແລະ ແຈ້ງມາຍັງທ່ານເພື່ອຮັບຊາບດ້ວຍ.

ຫົວໜ້າກົມ

ດຣ. ບົວສັນ ພະຄຸນທອງ

ອົງການເວີລດ໌ເອດຢູເຄຊັ່ນ ປະຈຳ ສປປ ລາວ
WORLD EDUCATION IN THE LAO P.D.R

WEC/L 074. 05.18

ທີ່ນະຄອນຫຼວງວຽງຈັນ, ວັນທີ 11 ພຶດສະພາ 2018

ໜັງສືສະເໜີ

ຮສ.ດຣ.ບຸນໜັກ ໄຊຊະນະສິງຄາມ

ຮຽນ ທ່ານ ດຣ ບຸນໜັກ ໄຊຊະນະສິງຄາມ, ຫົວໜ້າກົມປັ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ, ກະຊວງສາທາລະນະສຸກ, ທີ່ນັບຖື!

ເລື່ອງ: ຂໍອະນຸຍາດຈັດກິດຈະກຳກ່ອນການໄດ້ຮັບອະນຸມັດໂຄງການໂອກາດດ້ວຍທຶນສະໜັບສະໜຸນຂອງ ອົງການ USAID.

– ອີງຕາມແຜນການຂອງໂຄງການໂອກາດ ດ້ວຍທຶນສະໜັບສະໜຸນຂອງອົງການ **USAID** ໃນການປະຕິບັດກິດຈະກຳຮ່ວມກັບ ກົມປັ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ, ກະຊວງສາທາລະນະສຸກ ສຳລັບໄລຍະປີ 2018-2022.

ອົງການເວີລດ໌ເອດຢູເຄຊັ່ນ ປະຈຳ ສປປ ລາວ ຂໍສະແດງຄວາມນັບຖືມາຍັງທ່ານຫົວໜ້າກົມປັ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ, ກະຊວງສາທາລະນະສຸກ ແລະ ຮຽນສະເໜີມາຍັງທ່ານຊາບວ່າ ອົງການເວີລດ໌ເອດຢູເຄຊັ່ນ ປະຈຳ ສປປ ລາວ ເຊິ່ງເປັນສ່ວນໜຶ່ງຂອງໂຄງການໂອກາດ (Okard) ດ້ວຍທຶນສະໜັບສະໜຸນຂອງອົງການ USAID ໄດ້ໃຫ້ຄຳໝັ້ນສັນຍາທີ່ຈະໃຫ້ການສະໜັບສະໜຸນ ກະຊວງສາທາລະນະສຸກ ເພື່ອຈັດຕັ້ງປະຕິບັດແຜນຍຸດທະສາດແຫ່ງຊາດ ດ້ານການຟື້ນຟູໜ້າທີ່ການ ແລະ ແຜນປະຕິບັດງານພາກພື້ນດ້ານການຟື້ນຟູໜ້າທີ່ການ ສຳລັບຂົງເຂດປາຊີຟິກຕາເວັນຕົກ ໃນໄລຍະປີ 2019-2023.

ສາມຂົງເຂດຂອງການຟື້ນຟູໜ້າທີ່ການ ທີ່ທາງໂຄງການໂອກາດຈະສາມາດປະກອບສ່ວນມີຄື:

ກ. ສ້າງໂອກາດໃນການຝຶກອົບຮົມ ສຳລັບຜູ້ໃຫ້ບໍລິການທາງດ້ານສຸຂະພາບທີ່ກ່ຽວຂ້ອງ;
ຂ. ສະໜັບສະໜຸນສຸນປັ່ນປົວ ແລະ ການຟື້ນຟູໜ້າທີ່ການ ເພື່ອສະໜອງເຄື່ອງຊ່ວຍດ້ານເຕັກໂນໂລຊີທີ່ເໝາະສົມ ແລະ ສ້າງແນວທາງປະຕິບັດທີ່ດີທີ່ສຸດ;
ຄ. ສົ່ງເສີມການຟື້ນຟູໜ້າທີ່ການ ໃຫ້ກາຍເປັນສ່ວນໜຶ່ງຂອງການຮັກສາສຸຂະພາບຢ່າງຕໍ່ເນື່ອງ.

ເພື່ອບັນລຸວຽກງານດັ່ງກ່າວນັ້ນ, ທາງອົງການ ຈຶ່ງຖືເປັນກຽດຢ່າງສູງ ຮຽນສະເໜີມາຍັງທ່ານ ເພື່ອຂໍອະນຸຍາດຈັດ 2 ກິດຈະກຳກ່ອນ ການໄດ້ຮັບອະນຸມັດໂຄງການໂອກາດ ດ້ວຍທຶນສະໜັບສະໜຸນຂອງອົງການ USAID, ຊຶ່ງປະກອບດ້ວຍ:

1) ດຳເນີນການປະເມີນມາດຕະຖານຂອງອົງການອະນາໄມໂລກກ່ຽວລະບົບການຟື້ນຟູໜ້າທີ່ການ (STARS) ຢູ່ໃນປະເທດລາວ; ແລະ

ຕູ້ ປນ 6782 ວຽງຈັນ, ສປປ ລາວ. ໂທລະສັບ/ແຟກ: 856-21-214524, 222439, 217553
P.O. Box: 6782 Vientiane, Lao PDR. Tel/Fax: 856-21-214524, 222439, 217553. E-mail: wec@laopdr.com

2) ການໄປທັດສະນະສຶກສາທີ່ປະເທດໄທ ເພື່ອກຳນົດໂອກາດທາງດ້ານທຶນການສຶກສາ ສຳລັບຜູ້ຊ່ຽວຊານດ້ານການຟື້ນຟູໜ້າທີ່ການ.

ຄຳຂະທິບາຍເຫດຜົນ ແລະ ລາຍລະອຽດກ່ຽວກັບແຕ່ລະກິດຈະກຳທີ່ສະເໜີຂໍປະຕິບັດ ມີດັ່ງນີ້:

I. ດຳເນີນການປະເມີນມາດຕະຖານຂອງອົງການອະນາໄມໂລກ ກ່ຽວລະບົບການຟື້ນຟູໜ້າທີ່ການ (STARS) ຢູ່ໃນປະເທດລາວ

ການປະເມີນມາດຕະຖານຂອງອົງການອະນາໄມໂລກ ກ່ຽວກັບລະບົບການຟື້ນຟູໜ້າທີ່ການ (*STARS*) ແມ່ນເຄື່ອງມືທີ່ໄດ້ຮັບການຮັບຮອງຈາກ ອົງການອະນາໄມໂລກ ສຳລັບລະບົບພື້ນຖານໃນການຟື້ນຟູໜ້າທີ່ການ, ສະນັ້ນ ທາງໂຄງການຈະສະໜັບສະໜູນ ກົມປົ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ (DHR) ໃນການດຳເນີນການເລີ່ມຕົ້ນກ່ອນການເຊັນບົດບັດທຶກຄວາມເຂົ້າໃຈ, ຊຶ່ງຄາດວ່າຈະໃຫ້ສຳເລັດກ່ອນທ້າຍເດືອນກັນຍາ 2018.

ອົງການອະນາໄມໂລກ ໄດ້ພັດທະນາ "*ຊຸດສະໜັບສະໜູນການຟື້ນຟູໜ້າທີ່ການ*" ເພື່ອຊ່ວຍລັດຖະບານໃນການເສີມສ້າງລະບົບສຸຂະພາບ ເພື່ອໃຫ້ການບໍລິການທາງດ້ານການຟື້ນຟູໜ້າທີ່ການ. ຫນຶ່ງໃນສີ່ຂັ້ນຕອນຂອງຊຸດສະໜັບສະໜູນແມ່ນດຳເນີນການປະເມີນລະບົບການຟື້ນຟູໜ້າທີ່ການ ເພື່ອກຳນົດສະຖານະການໃນປະຈຸບັນ.

ການປະເມີນຂອງອົງການອະນາໄມໂລກ STARS ໄດ້ເຮັດຂຶ້ນເພື່ອສ້າງບົດລາຍງານທີ່ມີຄຸນນະພາບ, ຄົບຖ້ວນ ແລະ ມີມາດຕະຖານພ້ອມຂໍ້ມູນຈາກທຸກໆພາກສ່ວນຂອງລະບົບສຸຂະພາບທີ່ກ້ຳມ່ດຈຸດແຂງ, ຈຸດອ່ອນ ແລະ ຂໍ້ແນະນຳ ສຳລັບການສ້າງຂີດຄວາມອາດສາມາດຂອງລະບົບການຟື້ນຟູໜ້າທີ່ການ. ເມື່ອສຳເລັດການປະເມີນສະຖານະການຮອບນີ້ຢູ່ໃນ ສປປ ລາວ, ມັນຈະລະບຸພື້ນຖານທີ່ເຂັ້ມແຂງໃຫ້ແກ່ ກົມປົ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ ເພື່ອພັດທະນາແຜນປູລົມມະສິດ ແລະ ວາງແຜນການຈັດຕັ້ງປະຕິບັດແຜນຍຸດທະສາດແຫ່ງຊາດ ດ້ານການຟື້ນຟູໜ້າທີ່ການ. ການປະເມີນທີ່ລະອຽດນີ້ຍັງຈະສອດຄ່ອງ ແລະ ສະໜອງຂໍ້ມູນ ສຳລັບການປະເມີນເຂົ້ນພື້ນຖານທີ່ດຳເນີນ ໂດຍອົງການອະນາໄມໂລກ ມະນິລາ ເພື່ອຕິດຕາມກວດກາການຈັດຕັ້ງປະຕິບັດແຜນປະຕິບັດງານພາກພື້ນໃນດ້ານການຟື້ນຟູໜ້າທີ່ການ ສຳລັບອົງເຂດປາຊີຟິກຕາເວັນຕົກ(2019-2023).

ການປະເມີນມາດຕະຖານຂອງອົງການອະນາໄມໂລກ ກ່ຽວກັບລະບົບການຟື້ນຟູໜ້າທີ່ການ (STARS) ແມ່ນຮຽກຮ້ອງໃຫ້ກົມປົ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ ສ້າງຕັ້ງຄະນະກຳມະການຊີ້ນຳຊ່ວຍເຫລືອ (ຫຼື ໜ່ວຍງານທີ່ຮັບຜິດຊອບສະເພາະ) ໄວເທົ່າທີ່ຈະໄວໄດ້, ຊຶ່ງຈະມີພາລະກິດດັ່ງນີ້:

1) ຮວບຮວມຂໍ້ມູນທີ່ຈຳເປັນກ່ຽວກັບລະບົບການຟື້ນຟູໜ້າທີ່ການ ທີ່ມີຢູ່ໂດຍນຳໃຊ້ຂໍ້ມູນຂ່າວສານ ແລະ ແບບສອບຖາມຄວາມສາມາດດ້ານການຟື້ນຟູໜ້າທີ່ການ ຂອງ WHO STARS;
2) ຕິດຕາມທີ່ປຶກສາທີ່ໄດ້ຮັບການຮັບຮອງຈາກ WHO (ສະໜັບສະໜູນໂດຍ ໂຄງການໂອກາດ USAID Okard) ເພື່ອດຳເນີນການປະເມີນພາຍໃນປະເທດໂດຍນຳໃຊ້ເຄື່ອງມື STARS ຮ່ວມກັນກັບຜູ້ຮ່ວມງານຂອງລັດຖະບານ (ໃຊ້ເວລາປະມານ 2 ອາທິດ).

3) ສົ່ງຮ່າງບົດລາຍງານ (ຈັດທຳໂດຍທີ່ປຶກສາ) ພາຍໃນ 4 ອາທິດ ຂອງການປະເມີນພາຍໃນປະເທດ ເພື່ອໃຫ້ ລັດຖະບານ ລາວ ແລະ ທະນາຄານໂລກ ໄດ້ທົບທວນຄືນ ເພື່ອສະໜອງຄຳຄິດເຫັນໃຫ້ແກ່ທີ່ປຶກສາ ໃນການສະຫຼຸບບົດລາຍງານໃຫ້ສົມບູນ.

II. ການໄປທັດສະນະສຶກສາທີ່ປະເທດໄທເພື່ອກຳນົດໂອກາດທາງດ້ານທຶນການສຶກສາສຳລັບຜູ້ຊ່ຽວຊານດ້ານການຟື້ນຟູ ໜ້າທີ່ການ

ໂຄງການໂອກາດ ຈະສະໜັບສະໜູນກົມປົ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ ເພື່ອດຳເນີນຢ້ຽມຢາມການໄປ ທັດສະນະສຶກສາທີ່ປະເທດໄທ ເພື່ອກຳນົດໂອກາດທາງດ້ານທຶນການສຶກສາ ສຳລັບຜູ້ຊ່ຽວຊານດ້ານການຟື້ນຟູໜ້າທີ່ ການກ່ຽວກັບການເຊັນບົດບັດທີ່ກວ້ວາມເຂົ້າໃຈໂຄງການ.

ໂຄງການໂອກາດ ຈະສາມາດໃຫ້ການສະໜັບສະໜູນ ກະຊວງສາທາລະນະສຸກ ໃນດ້ານທຶນການສຶກສາໃຫ້ແກ່ ແພດໝໍທີ່ລົງເລິກດ້ານການແພດຟື້ນຟູໜ້າທີ່ການ, ນັກກາຍະພາບບຳບັດ, ນັກກິດຈະກຳບຳບັດ ແລະ ນັກປາໄສບຳບັດ ພາສາ ແລະ ການເວົ້າ. ເພື່ອຮັດໃຫ້ ກົມປົ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ ສາມາດຂຽນແຜນລະອຽດກ່ຽວກັບທຶນການສຶກສາທີ່ ເປັນສ່ວນໜຶ່ງຂອງບົດສະເໜີຂໍການຊ່ວຍເຫຼືອທີ່ບໍ່ເປັນເງິນ, ຈຶ່ງຈຳເປັນຕ້ອງໄດ້ເກັບກຳຂໍ້ມູນທາງດ້ານເງື່ອນໄຂການສຶກ ສາ, ເນື້ອໃນຫຼັກສູດ ແລະ ຄ່າໃຊ້ຈ່າຍຕ່າງໆຈາກປັນດາ ມະຫາວິທະຍາໄລ ຢູ່ກຸງເທບ, ຂອນແກ່ນ, ປະເທດໄທ. ສະນັ້ນ, ທາງໂຄງການ ຈຶ່ງມີຈຸດປະສົງ ສະໜັບສະໜູນຜູ້ຕາງໜ້າຈາກ ກົມປົ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ 1 ທ່ານ, ສູນການແພດຟື້ນຟູໜ້າທີ່ການ 1 ທ່ານ, ຄະນະເຕັກນິກການແພດ 1 ທ່ານ ແລະ/ຫຼື 1 ທ່ານຈາກ ກົມຄົ້ນຄ້ວາ ແລະ ຝຶກອົບຮົມ, ລວມທັງໝົດບໍ່ເກີນ 4 ທ່ານ ເພື່ອເຂົ້າຮ່ວມການເດີນທາງໄປທັດສະນະສຶກສາ ໃນແຕ່ລະ ມະຫາວິທະຍາໄລ ເພື່ອເກັບກຳຂໍ້ມູນດັ່ງກ່າວ, ຊຶ່ງຄາດວ່າຈະໃຫ້ສຳເລັດ ກ່ອນທ້າຍເດືອນ ມິຖຸນາ 2018.

ອົງການເວີລດ໌ເອດຢູເຄຊັນ ປະຈຳ ສປປ ລາວ ຫວັງເປັນຢ່າງຍິ່ງວ່າທ່ານຈະພິຈາລະນາ ອະນຸຍາດໃຫ້ ທາງ ໂຄງການໂອກາດ ຊ່ວຍສະໜັບສະໜູນ ກົມປົ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ ເພື່ອຈັດຕັ້ງການປະເມີນ STARS ແລະ ເດີນທາງໄປທັດສະນະສຶກສາທີ່ມະຫາວິທະຍາໄລຕ່າງໆຢູ່ປະເທດໄທ ຮ່ວມກັບຜູ້ຕາງໜ້າຈາກສູນການແພດຟື້ນຟູໜ້າ ທີ່ການ-ຄະນະເຕັກນິກການແພດ-ກົມປົ່ນປົວ ແລະ ຟື້ນຟູໜ້າທີ່ການ ເພື່ອເກັບກຳຂໍ້ມູນສຳລັບການສະໜອງທຶນການ ສຶກສາຫຍໍ້ການເຊັນບົດບັດທີ່ກວ້ວາມເຂົ້າໃຈ ຕາມການສະເໜີມາຂ້າງເທິງນີ້ຕາມຫາງຄອມດ້ວຍ.

ດັ່ງນັ້ນ, ຈຶ່ງຮຽນສະເໜີມາຍັງທ່ານ ເພື່ອພິຈາລະນາ ແລະ ອະນຸຍາດໃຫ້ຕາມທາງຄອມດ້ວຍ.

ຮຽນມາດ້ວຍຄວາມເຄົາລົບ ແລະ ນັບຖືຢ່າງສູງ!

ຫົວໜ້າອົງການເວີລ໌ດເອດຢູເຄຊັນ ປະຈຳ ສປປ ລາວ

WORLD EDUCATION CONSORTIUM IN THE LAO P.D.R.

ມາກ ກໍແມນ
Mark GORMAN

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Acronyms

AP	Assistive Products
CBR	Community Based Rehabilitation
CDC	Child Development Center
CMR	Center for Medical Rehabilitation
CPD	Continuing Professional Development
DHIS2	District Health Information Software2
DHR	Department of Health Care and Rehabilitation
EHSP	Essential Health Services Package
FMT	Faculty of Medical Technology
HI	Humanity & Inclusion (formerly Handicap International)
HIS	Health Information System
HSDP	Health Sector Development Plan
ISPO	International Society for Prosthetics and Orthotics
MOH	Ministry of Health
MOLSW	Ministry of Labor and Social Welfare
NCD	Non-communicable disease
NCDE	National Committee for Disabled People and Elderly
NGO	Non-Governmental Organization
OT	Occupational Therapy
PT	Physical Therapy (Physiotherapy)
PMR	Physical Medicine and Rehabilitation
P&O	Prosthetics and Orthotics
PRSC[1]	Provincial Rehabilitation Sub-Center
RCQ	Rehabilitation Capacity Questionnaire
RMM	Rehabilitation Maturity Model

[1] PRSCs are synonymous with PRCs (Provincial Rehabilitation Centers) and PRUs (Provincial Rehabilitation Units).

SLT	Speech Language Therapy
STARS	Systematic Assessment of Rehabilitation Situation (WHO Standard Tool)
UHS	University of Health Sciences
UNCRPD	United National Convention on the Rights of Persons with Disabilities
USAID	United States Agency for International Development
UXO	Unexploded Ordnance
WCPT	World Confederation for Physical Therapy
WHO	World Health Organization
WPRO	Western Pacific Regional Office (WHO)

Contents

Timeline: STARS (Systematic Assessment of Rehabilitation Situation) Rehabilitation Maturity Model in Lao PDR

7 February 2017
Deputy Minister of MoH and CoP USAID Okard attended the "Rehabilitation 2030: a call for action" in Geneva

13-14 June 2018
CoP USAID Okard attended "Rehabilitation in Health Systems – a guide for action" training at WHO Geneva

4 March 2019
STARS consultant, Sue Eitel arrived in-country and finalized the STARS agenda with MoH

6 March 2019 (Savannakhet)
- Meeting with Director of Provincial Health Department, Director of Provincial Hospital and PRC
- Visited Provincial Hospital and PRC facilities

5 March 2019
- Courtesy visit to Head of Cabinet of MoH
- Roundtable meeting with all MoH departments to validate findings of Rehabilitation Capacity Questionnaire (RCQ)

7 March 2019
FGDs with service users and international rehabilitation actors (ICRC, CBM, HI, WEd)

11 March 2019
- Meeting with CMR and tour of rehabilitation facilities
- FGD with rehabilitation service providers and frontline staff

13 March 2019
Visited district and central hospitals and interviewed both management and clinical staff

12 March 2019
- Meeting with Faculty of Medical Technology
- Visited rehabilitation center of the MoLSW in Ban Keun

14 March 2019
Meetings with: Director of Planning Department, WHO Country Office, Deputy Health Personnel Department and Vice-Minister of Health

15 March 2019
STARS debriefing session to share initial findings with high level MoH officials

26 April 2019
Review and validation of the ZERO STARS report

Executive Summary

The Lao People's Democratic Republic (PDR) Ministry of Health (MOH), together with the Center for Medical Rehabilitation (CMR), has provided governance and leadership for rehabilitation[2] over many decades and is committed to strengthening rehabilitation in the country. MOH authorization for an assessment of the rehabilitation situation in Lao PDR is a reflection of this commitment.

The assessment utilizes a newly developed method and reporting template (launched in 2018) from the World Health Organization (WHO), called the Systematic Assessment of Rehabilitation Situation (STARS). This situation assessment provides an opportunity to review the current status and further guide next steps in the sector. The in-country data collection and preliminary analysis occurred in March 2019. The consultant, Susan Eitel, worked together with the MOH Department of Health Care and Rehabilitation and the United States Agency for International Development (USAID) Okard Activity technical team to consolidate findings and develop this report.

There are many positive developments and trends in rehabilitation in Lao PDR. The report framework aligns with the five pillars of Lao PDR's health sector reform (governance, health information systems, financing, human resources, and service delivery) and WHO's building blocks for health system strengthening.

The key challenges and conclusions highlighted in the executive summary are illustrative and not exhaustive. That said, **the major challenge experienced throughout the entire assessment process is the lack of a functioning rehabilitation committee. In addition, a functioning rehabilitation committee is vital for the review of the draft assessment report as well as moving forward with report recommendations.**

Table 1. Key challenges and conclusions

A. REHABILITATION GOVERNANCE	
CHALLENGES	CONCLUSIONS
1. The MOH has approved, but not yet launched and operationalized, multiple rehabilitation-related processes and documents.[3]	1. The existing processes and documents can readily provide a solid foundation from which to strengthen the rehabilitation sector.
2. The MOH has not identified a specific focal point for rehabilitation. In practice, leadership is divided between the CMR and the Department of Health Care and Rehabilitation.	2. The absence of a specific focal point with clear and consistent terms of reference reduces efficiency and contributes to potential miscommunication.

[2] Throughout this document, rehabilitation is used synonymously with "rehabilitation medicine" in the Lao context. For additional information on rehabilitation, see *Appendix A* of this report.

[3] These include *Lao PDR National Rehabilitation (Medicine) Strategy 2018-2025* (No. 2217/MOH) 10 Oct 2018*, Organization and Operations of CMR – (No. 1859/MOH) 04 Aug 2016*; *Organization and Operation of DHR – (No. 2029/MOH) 20 Sept 2017*; and *Establishment and Function of Provincial Medical Rehabilitation Sub-Centers in Oudomxay, Xiengkhouang, Luangprabang, Savannakhet, and Champasak – (No. 2858/MOH) 27 Nov 2017*.

3. Both the MOH and the Ministry of Labor and Social Welfare (through the Secretariat of the National Committee for Disabled People and Elderly - NCDE) manage rehabilitation centers with little evidence of collaboration.	3. Without collaboration the rehabilitation centers under MOH and NCDE may develop incongruous service standards, protocols and financing policies. This will weaken opportunities for a country-wide approach to provision of assistive products.

B. REHABILITATION INFORMATION	
CHALLENGES	CONCLUSIONS
4. There is very little evidence-based data on the need for or effectiveness of rehabilitation.	4. Rehabilitation planning and decision-making is reduced when it is not driven by objective data.
C. REHABILITATION FINANCING	
CHALLENGES	CONCLUSIONS
5. Rehabilitation costs and government expenditure on rehabilitation are unknown or underdeveloped.	5. Lack of cost calculations for rehabilitation may limit effective budgeting and cost benefit analysis.
D. HUMAN RESOURCES AND INFRASTRUCTURE	
CHALLENGES	CONCLUSIONS
6. The Faculty of Medical Technology offers physical therapy and prosthetic/orthotic training courses, but these are not internationally accredited.	6. Achieving international accreditation may contribute to graduates with higher competency levels.
7. The rehabilitation workforce is predominantly physical therapists trained at diploma level. Occupational and speech therapists are not present.	7. A mono-disciplinary rehabilitation workforce with lower level training may limit the outcomes and impact of rehabilitation interventions.
8. Only one medical doctor specialized in physical medicine and rehabilitation (PMR).	8. Limited availability of PMR doctors likely reduces referrals to, and utilization of, rehabilitation services.
E. REHABILITATION SERVICES	
CHALLENGES	CONCLUSIONS
9. Evidence and reports of a low demand for physical therapy services at provincial and district levels.	9. Hospitals prioritize staffing positions based on need; underutilization may lead to reallocation of staff from rehabilitation to other hospital services.
10. Physical therapy treatments focus on modalities[4] with limited attention to manual therapies and exercise, evidence-based practices, optimal dosing or treatment outcomes.	10. Without attention to treatment outcomes and utilization of evidence-based care, the effectiveness of rehabilitation may be reduced.

[4] Modalities entail use of electrotherapeutic, thermal, light, and ultrasound machines.

11. Rehabilitation centers provide a limited number of assistive products; this is supplemented by private pharmacies in larger cities.	11. Until the Lao PDR government establishes policies for assistive products, they will likely remain inaccessible to most of the population.
F. REHABILITATION OUTCOMES AND SYSTEM ATTRIBUTES	
CHALLENGES	CONCLUSIONS
12. Rehabilitation at district and community levels is very limited, and case management /referral pathways are underdeveloped.	12. Rehabilitation will remain inaccessible in remote areas without attention to service provision or referrals at community and district levels.

Key recommendations

1. ***Operationalize existing rehabilitation policies and frameworks***
   It is recommended that the MOH:

   1.1. Review and launch the National Rehabilitation Committee (approved in October 2018). This Committee provides a neutral platform for discussion and an opportunity to address issues related to rehabilitation across all health system building blocks.

   1.2. Distribute the *National Rehabilitation Medicine Strategy (2018-2025).* Awareness of the Strategy may encourage stakeholder dialogue and create opportunities for programmatic synergy.

   1.3. Apply STARS findings, content of the *National Rehabilitation Medicine Strategy (2018-2025*), and existing WHO rehabilitation indicators to develop a monitoring and evaluation pathway / tool for rehabilitation in Lao PDR.

2. ***Consolidate rehabilitation leadership and coordination***
   It is recommended that the MOH:

   2.1. Utilize the National Rehabilitation Committee as the key coordinating body to lead and regulate all aspects of rehabilitation planning and implementation.

   2.2. Identify a specific focal point for rehabilitation with clear reporting structures and decision-making capacities. This will streamline communication and reduce potential for duplication.

   2.3. Revise documentation on roles and responsibilities of the Department of Health Care and Rehabilitation, Center for Medical Rehabilitation, and the Provincial Rehabilitation Sub-Centers.

   2.4. Revitalize discussions with the National Committee for Disabled People and Elderly to create synergies and standards between rehabilitation centers and within the rehabilitation sector.

3. ***Augment rehabilitation data collection for effective planning and decision-making***
   It is recommended that the MOH:

3.1. Review the DHIS2 platform and recommend changes to include rehabilitation-related data.

3.2. Consider adding rehabilitation indicators in the forthcoming Health Sector Development Plan.

3.3. Develop and promote outcome measures in data collected at service level.

4. Allocate resources for rehabilitation services across all levels of health care

It is recommended that the MOH:

4.1 Support cost calculation initiatives for rehabilitation services to inform budget requests.

5. Upgrade physical therapy and prosthetic/orthotic pre-service training to international standards

It is recommended that the MOH (through the UHS-Faculty of Medical Technology):

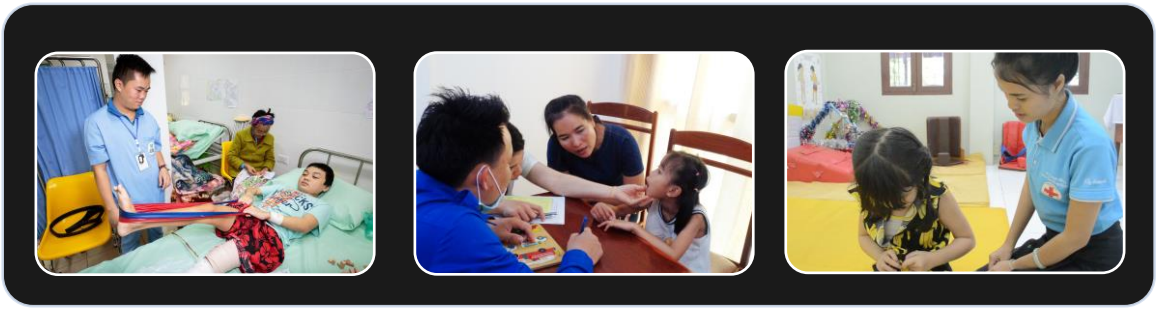
5.1. Encourage collaboration with World Confederation for Physical Therapy (WCPT) and the International Society for Prosthetics and Orthotics (ISPO) to support physical therapy (PT) and Prosthetic & Orthotic (P&O) curriculum review.

5.2. Strengthen clinical education learning experiences.

6. Strengthen the capacity of the rehabilitation workforce

It is recommended that the MOH:

6.1. Support scholarships for PT, speech and language therapy (SLT), occupational therapy (OT), and specialization in PMR training at internationally accredited schools.



6.2. Ensure that positions within the MOH structures are created for returning graduates.

6.3. Establish regulatory mechanisms for rehabilitation workforce licensure.

6.4. Develop /provide continuing professional development programs and opportunities.

7. Address the under-utilization of PT services within the MOH centers, units and hospitals

It is recommended that the MOH:

7.1. Identify causes of under-utilization and develop mitigation strategies.

8. Prioritize evidence-based care and treatment outcomes in rehabilitation service delivery

It is recommended that the MOH:

8.1. Create a task force to review current treatment practices against existing evidence and international practice standards and advise on course modifications as needed.

9. Establish guiding frameworks related to procurement and provision of assistive products

It is recommended that the MOH:

9.1. Solicit support from WHO to begin steps toward developing a Priority List of Assistive Products for Lao PDR together with guidance on procurement and provision.

10. Expand opportunities for rehabilitation services at district and community level

It is recommended that the MOH:

10.1. Invest in innovative measures to provide basic rehabilitative care and strengthen referral pathways for cases needing more advanced care.

1. Background and Methodology

Lao PDR Country Context

Lao PDR is a landlocked country comprising 17 provinces (plus Vientiane capital) with 148 districts and 8,464 villages. The population surpasses 6.7 million people with 13% over age 50 (~949,000 people).[5] The country is mountainous, ethnically diverse, and predominantly Buddhist (64%). The country reached lower-middle-income status in 2011 and is one of the fastest growing economies in South-East Asia.

Lao PDR's *Vision 2030* guides national policies. The *Vision* sees Lao PDR as a middle-to-high income country with balanced economic and social development, political stability, and providing social order and social safety nets. The *8th Five-Year National Socio-economic Development Plan (2016-2020)* focuses on continued poverty reduction, graduation from least developed country status, effective management and use of natural resources, and strong regional and international integration.[6]

From 1964 to 1973, the United States dropped more than two million tons of ordnance on Laos during the Vietnam War. Over 270 million cluster bombs were released and up to 30% did not explode. Over 20,000 people have been killed or injured by unexploded ordnance since 1973[7]. In addition to resources for clearance activities (over $118M), the United States government (through USAID) has provided over $14M to strengthen disability and rehabilitation services (focusing on prosthetics/orthotics) in Lao PDR.

Health trends and rehabilitation needs in Lao PDR

Non-communicable diseases (NCDs), particularly cardiovascular disease, cancer, and diabetes are on the rise in Lao PDR. All can lead to increases in short and long-term disability. In 2014, NCDs are estimated to account for 48% of the total deaths in the country[8].

Road traffic crashes are also increasing in Lao PDR. In 2016, there were 5,616 reported road crashes, killing over 1,000 and injuring approximately 9,000 people. Of those injured, more than 1,000 were left in a critical condition.[9]

As with many countries in the Western Pacific Region, the Lao PDR population is ageing. In 2010, those over age 50 represented 12% of the population; this age group is expected to represent 18.9% of the population by 2030. Trends are also increasing for those over age 60 and age 80.[10] As populations age, people live with increasing levels of chronic disease and frailty which may increase the need for rehabilitation.

Specific to Lao PDR, there is also a risk of injury from unexploded ordnance (UXO) that contaminates nearly 25% of the country's villages. The incidence of injury from UXO is on the decline, but remains an ever-present danger in many parts of the country.

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[5] Lao Statistics Bureau https://www.lsb.gov.la/wp-content/uploads/2018/10/Yearbook-2017.pdf
[6] WHO, *Overview of Lao Health System Development (2009-2017)*
[7] Legacies of War http://legaciesofwar.org/about-laos/secret-war-laos/
[8] WHO (NCD) Country Profiles 2014: http://www.who.int/nmh/countries/lao_en.pdf
[9] WHO (WPRO) http://www.wpro.who.int/laos/mediacentre/releases/2017/20170410-road-accident-injuries/en/
[10] WHO (WPRO) http://www.wpro.who.int/topics/ageing/ageing_fs_laos.pdf

International, Regional and National developments related to rehabilitation

In February 2017 the World Health Organization (WHO) launched the *Rehabilitation 2030* initiative and a 'Call for Action' was raised[11], it identified ten areas for united and concerted action to reduce unmet needs for rehabilitation and strengthen its role in health. Also, in 2017 WHO released the *Rehabilitation in health systems guidelines*[12], which provides foundational recommendations for strengthening rehabilitation in the health sector and better integrating it across health programs. Central to the WHO recommendations is that rehabilitation is a health service for all the population. It should be made available at all levels of healthcare, and Ministries of Health should provide strong leadership to strengthen rehabilitation and develop rehabilitation strategic plans.

WHO's Global Conference on Primary Health Care (Astnana, Kazakhstan – October 2018) noted that rehabilitation is essential in primary health care.

Regionally, at the 69th WHO Regional Committee Meeting for the Western Pacific, a resolution was passed by Member States in the Region, including the commitment to strengthen rehabilitation in line with the *Western Pacific Regional Framework on Rehabilitation (2018-2023)*. The framework proposes four priority areas for Member States to strengthen rehabilitation within their contexts. These include: service availability and quality, governance and financing, workforce, data and research.

WHO's Regional Office for the Western Pacific (WPRO) is committed to rehabilitation and has contributed to previous rehabilitation-related assessments in Lao PDR: 1) *Rehabilitation Sector Situation Analysis Report Lao PDR April-May 2013,* and 2) *Capacity Assessment and Development Plan to Increase Capacity of Lao PDR Rehabilitation Workforce, Report to WHO Western Pacific Regional Office Handicap International, World Education June 2015*. Both documents were instrumental in providing a foundation for the current assessment.

Lao PDR developed its own rehabilitation strategy in line with WHO's global and regional actions. This strategy, the *Lao PDR National Rehabilitation (Medicine[13]) Strategy 2018-2025* outlines six strategic objectives to scale-up rehabilitation medicine in Lao PDR. Details are provided in *Section 3* of this report.

[11] Available at http://www.who.int/disabilities/care/CallForAction.pdf?ua=1
[12] WHO (2017), Rehabilitation in Health Systems. World Health Organization, Geneva, Switzerland.
[13] The English title of the *Strategy* does not include "medicine" while the Lao version has medicine as part of the title.

Methodology

The situation assessment occurred in three stages:

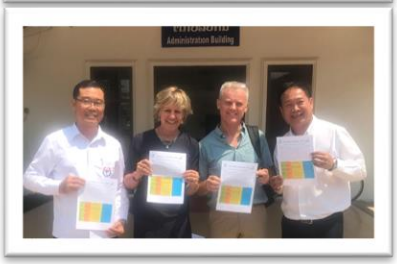
Stage 1:

The foundational work for the assessment began in early 2018 with USAID Okard's translation of the WHO Rehabilitation Capacity Questionnaire (RCQ) and multiple guidance and reference documents for STARS.

In late November 2018, Dr. Bouathep Phoumindr, Deputy Director General of Health Care and Rehabilitation Department, circulated the RCQ to 26 different offices and locations with a request to fill and return by mid-January 2019. Ten responses were received; these were translated by the USAID Okard team and sent to the consultant in late February.

In early February a Drop Box was created to compile over 50 resource documents related to heath care and rehabilitation in Lao PDR. These were availed to the consultant and the assessment team.

Stage 2:



The in-country data collection occurred from March 4-15, 2019. The assessment team comprised an international consultant (Sue Eitel), DHR representation (Dr. Bouathep) and the USAID Okard technical team (Bernard Franck, Lori Baxter, Donna Koolmees). The team conducted key informant interviews, focus group discussions, Strength Weakness Opportunity Threat (SWOT) analysis, and site visits to health and rehabilitation services in Vientiane and in Savannakhet Province. See *Appendix D* for the summary schedule.

The assessment team developed a condensed briefing document that was provided to all individuals who participated in the assessment (see *Appendix B*).

The assessment process compares the existing country situation against the 54[14] components of the Rehabilitation Maturity Model (RMM). The components are summarized in *Appendix C*.

Each component is described along a four-level score reflecting the maturity of rehabilitation in the health system. During the assessment a score was given to each component to help the MOH visualize the preliminary assessment findings (see *Section 9* of this report for details).

[14] The original RMM had 54 components and the updated RMM has 57.

The purpose of the scoring exercise using the RMM is to provide an overview to the performance of different rehabilitation components. This overview enables comparison across components and domains that can then assist in the identification of priorities and recommendations. Within a country, it is anticipated that the results can be compared over time to inform progress.

At the end of the two-week period, a hard copy of preliminary findings-debriefing document (*Annex F*) was presented to MOH. As there was little time to discuss details, a further review was scheduled for April 2019.

Stage 3:

A preliminary review of the STARS findings was held at MOH on April 26th. The review was led by the international consultant (Sue Eitel) and attended by nine MOH staff[15] and two USAID Okard staff (Bernard Franck and Lori Baxter). The session was presented in English with simultaneous interpretation to Lao.

All participants received a zero draft of the STARS report in English and a hand-out to illustrate linkages between international, regional and national frameworks related to rehabilitation (*see Appendix G*). A PowerPoint presentation was used to guide the discussion.

The main meeting objectives: 1) Present and discuss preliminary STARS findings (using the debrief document in *Annex F*), 2) Orient MOH to the zero-draft report, 3) Collect feedback on the Executive Summary, and 4) Identify next steps in the process.

In general, the MOH was very receptive to the report and actively engaged in discussion on the findings. There were minor edits in the debriefing document as well as the Executive Summary. Participants in the preliminary review do not represent the rehabilitation committee. The next step in the process is completion of the first draft of the STARS assessment report and delivery to MOH by mid-May 2019. It is strongly recommended that the first draft be formally reviewed by a rehabilitation committee for recommended changes and that a pathway toward finalizing the document be created.

Limitations: **Minor limitations were encountered in all stages of the assessment.**

Stage 1:

This assessment process is part of a WHO global initiative. Ideally, the MOH formally notifies the WHO country office of the intent to conduct an assessment, requesting the technical input from WHO. Although the Lao PDR MOH supported the STARS, no request was made to WHO, and this limited the official engagement of the WHO country office. WHO strongly encourages the engagement of a rehabilitation working group/committee to consolidate and validate information collected through the RCQ and the preliminary RMM scores. A rehabilitation committee was not yet operational and thus the RCQ responses were varied and lacked cohesion.

[15] See page 53 for the list of participants.

Stage 2:

Due to scheduling conflicts, the assessment team was unable to meet with the Ministry of Labor and Social Welfare (MOLSW) and the National Committee for Disabled People and Elderly (NCDE). The MOLSW is known to provide support for Ban Koeun rehabilitation center, but their involvement in rehabilitation outside of this remains unknown. Due to limited time, the assessment team did not consult with the Ministry of Education and Sport.

The Director of the Department of Healthcare and rehabilitation had many competing demands during the assessment period. He welcomed a very short debrief on March 15, received the debriefing document (*Annex F*) and pledged to support a more formal review in late April. As with limitations noted from Stage 1, the absence of a functioning rehabilitation committee limited broader stakeholder feedback and engagement in reviewing preliminary assessment findings and RMM scores prior to development of the zero-draft report.

Stage 3:

Although there was active participation by MOH participants during the preliminary review of the STARS findings, this group does not represent the rehabilitation committee.

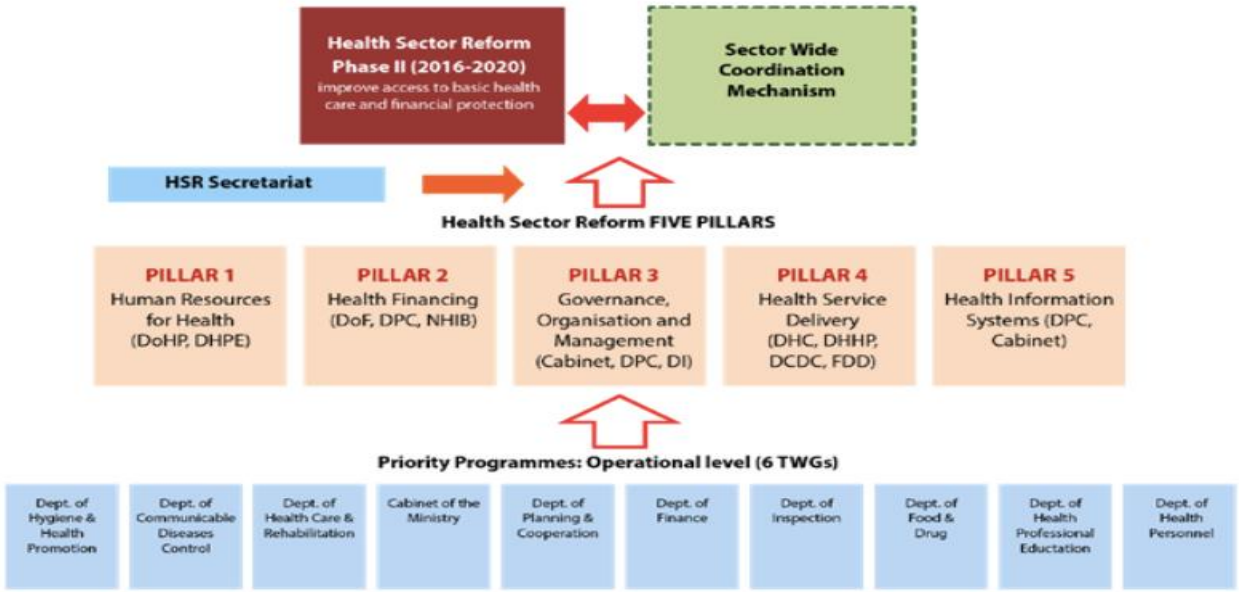
2. Overview to Lao PDR Health System and Rehabilitation

The MOH is the governing agency with responsibility for promotive, preventive, curative, rehabilitative and palliative care services that will improve the health status of the population.

The need to improve access to and quality of services is recognized in the *Lao Health Sector Reform Strategy and Framework 2013-2025 (HSRF)*. The Framework aims to achieve universal health coverage by 2025. Health system strengthening is central to the Framework's priority areas: health financing, health governance, human resources for health, health service delivery and the health information system. The implementation of the Framework is supported through the *8th Five-Year Health Sector Development Plan (HSDP)*, which identifies eight priority programs for 2016-2020. The priorities include:

1. Hygiene and Health Promotion
2. Prevention and Disease Control
3. Health Services
   - Bullet under 3.2.2. "Develop and strengthen rehabilitation services"
4. Protection of Food, Drugs and Medical Products consumers
5. Management, Human Resource Development & Health Science Research
6. Health Financing
7. Information and International Cooperation
8. Management and Inspection

Figure 1: Health sector reform integration with the eight programs of the HSDP.[16]



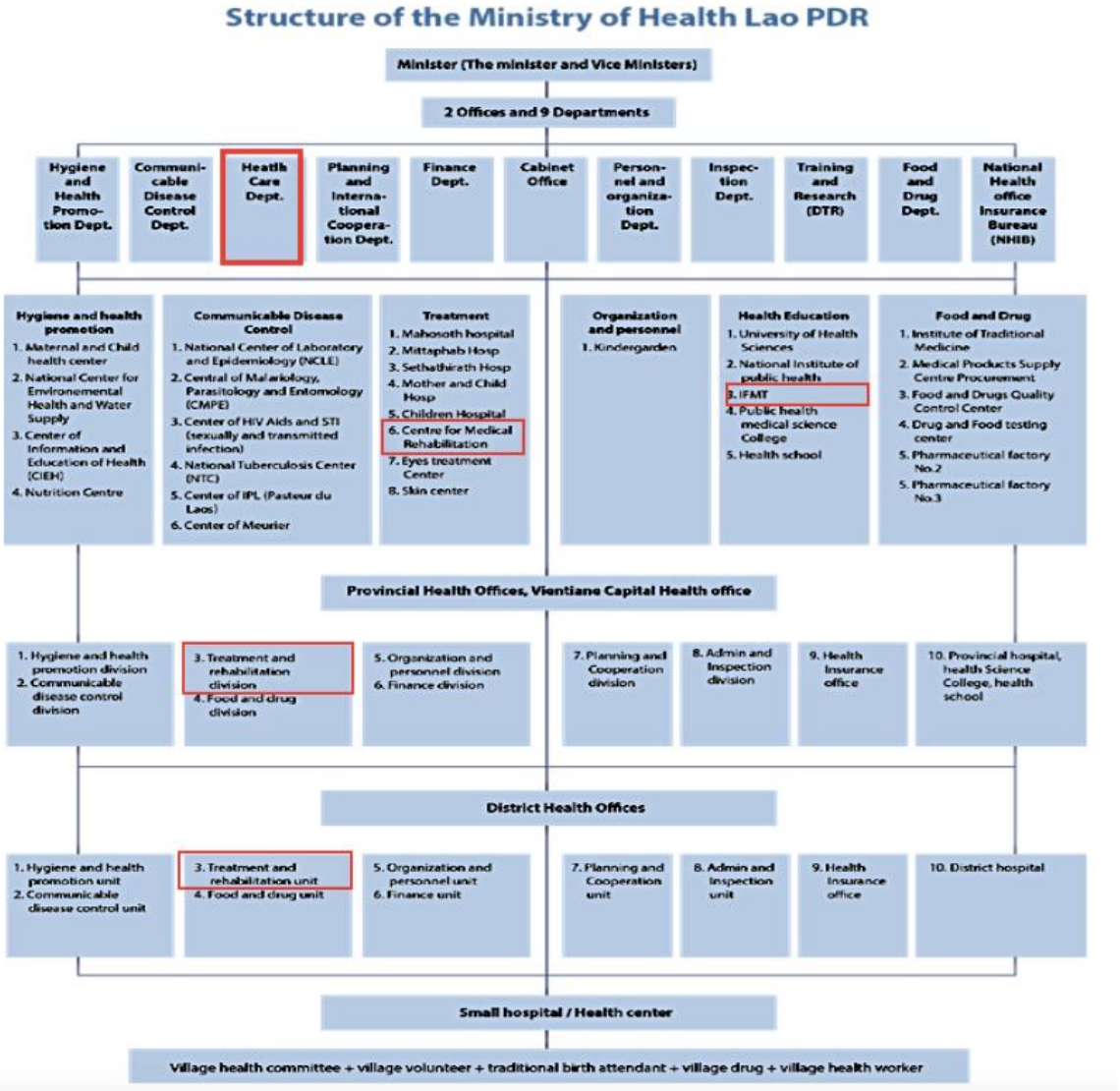
[16] WHO, *Overview of Lao Health System Development (2009-2017)*

The organizational structure of the MOH is provided in Figure 2. The former Department of Health Care was renamed the "**Department of Health Care and Rehabilitation (DHR)**" in 2017.

Although rehabilitation can be addressed through all structures within MOH, the red boxes in the organizational chart indicate those that have a direct responsibility for rehabilitation.

The **Center for Medical Rehabilitation (CMR)** provides direct rehabilitation care in Vientiane and oversight for four Provincial Rehabilitation Sub-Centers (PRSCs)[17]. The **Faculty of Medical Technology (FMT)** houses the PT and P&O Training Programs within the University of Health Sciences (UHS). Under the Provincial and District Health Offices, there is provision for the **Health Care and Rehabilitation Division/Unit** respectively.

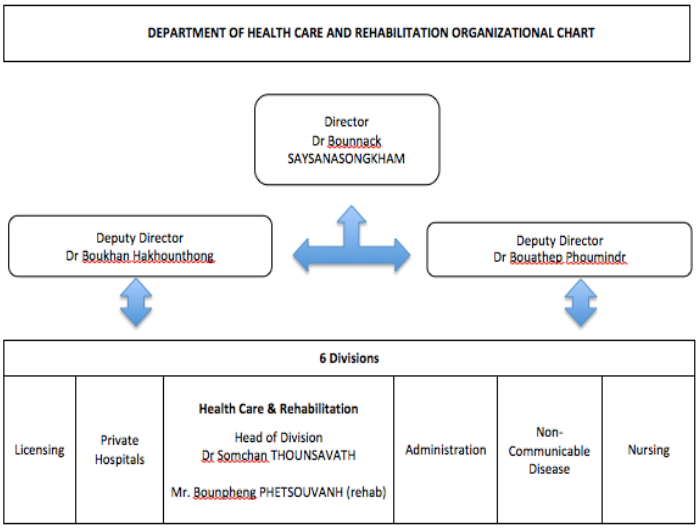
Figure 2. Structure and organization of the Ministry of Health and its health services[18]



[17] Note the PRSCs have previously been called Physical Rehabilitation Centers (PRCs) as well as Physical Rehabilitation Units (PRUs). For the purposes of this report and in alignment with current MOH terminology, they will be called PRSCs in this document.

[18] WHO, *Overview of Lao Health System Development (2009-2017)*

Figure 3. Structure and organization of the DHR



Currently, there are three individuals within the DHR structure with experience in, and professional dedication to, rehabilitation.

Dr. Bounnack is a former Deputy Director of the Health Care Department and managed rehabilitation activities in his former role.

Dr. Bouathep is the only physical medicine and rehabilitation doctor in the country and was the former Vice-Dean of the FMT.

Mr. Bounpheng is a trained PT and worked at CMR for nearly 20 years (in multiple capacities) before joining the DHR.

The MOH facilities across the country include 5 central hospitals and 3 specialized centers; 4 regional hospitals, 13 provincial hospitals, 136 district hospitals, and 1060 health centers. There are also 1050 private clinics[19]. Total number of beds = 11,070 of which there are less than 100 beds for rehabilitation (these are predominantly dormitory beds for the rehabilitation centers).

Rehabilitation intersects with the disability sector, as people with disabilities are a key population group who may benefit from rehabilitation. Lao PDR ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) in September 2009. Lao PDR has also drafted the *National Policy for Persons with Disabilities* and the *National Strategy and Action Plan for Disability 2017-2025*. Both of these documents were reviewed during a workshop from 13-15 March 2019 in Thalath (Lao PDR).

Within the MOLSW[20], the National Committee for Disabled People and Elderly (NCDE)[21] is responsible for disability-related policies and activities and for the oversight of Ban Koeun Rehabilitation Center outside of Vientiane. The National Regulatory Authority for UXO/Mine Action Sector in Lao PDR, mandated to coordinate efforts to assist UXO victims in the country, is also under MOLSW.

By far the largest portion of rehabilitation provided in Lao PDR is through government (public) hospital-based services and rehabilitation centers[22] with a workforce of mostly physical therapists.

International organizations and non-governmental organizations[23] contribute to the rehabilitation landscape through workforce capacity building (scholarships or in-country training), funding for

[19] Lao Statistics Bureau https://www.lsb.gov.la/wp-content/uploads/2018/10/Yearbook-2017-2.pdf
[20] As noted in this report, one of the limitations of this assessment was the inability to meet directly with MOLSW.
[21] Lao PDR (2013) *Decree on the Organization and Operation of the National Committee for Disabled People and Elderly (NCDE)* describes NCDE's location, roles, functions, rights, organizational structure and framework.
[22] The MoH rehabilitation centers include the CMR and four PRSCs (Xiengkhouang, Savanaket, Luang Prabang, Champasak). MoLSW also supports one rehabilitation center (Ban Koeun) in Vientiane.
[23] These include HI, ICRC, World Education, CBM, Deseret International Charities, COPE, and others.

assistive products, facilitating policy dialogue (international conferences and workshops), building renovations, equipment and materials, and information sharing (informal rehabilitation working-group).

3. Rehabilitation Governance

Key Components	Status
Leadership and Collaboration	*Limited and mixed*. The CMR and DHR each provide some level of leadership in rehabilitation, but small areas of overlap and confusion exist within and between them.
National Rehabilitation Strategic Plan	*Yes*. The MOH approved the *National Rehabilitation (Medicine) Strategy (2018-2025*) in October 2018. Not yet formally launched or distributed.
Coordination for Rehabilitation	*Limited*. The MOH approved the *National Rehabilitation Committee* in October 2018, but it is not yet operational. International organizations hold informal meetings.
Planning for Rehabilitation	*Limited.* There is evidence of some workforce planning but rehabilitation interventions to be delivered at each level of health care have not been clearly defined.
Regulatory Mechanisms	*Very limited*. Very few regulatory structures or mechanisms in place for the rehabilitation workforce or for assistive products.
Assistive Products Guidance	*Very Limited*. Very little leadership and stewardship for the procurement and provision of assistive products. There is no national procurement and no development of Priority Assistive Products List.

Rehabilitation Leadership and Collaboration

The Lao PDR is fortunate to have a MOH that values rehabilitation as part of health care. The Minister and Vice Minister (Dr. Phoutone Muongpak) have publicly announced their support, and adding rehabilitation to the Health Care Department title is further evidence of their engagement. The DHR is poised to lead the sector, but the lines of authority and decision-making for rehabilitation within the DHR have yet to be clearly articulated and formalized.

Meanwhile, the CMR (formerly known as the National Rehabilitation Center) has existed for over 50 years (established in the mid-1960s). The CMR, within MOH, has played a foundational role in shaping rehabilitation in Lao PDR. It provided initial training courses in PT and P&O, rehabilitation leadership and representation within MOH, and was/is the main

provider of rehabilitation services – especially prosthetics and orthotics. Since 2008, CMR has held an annual meeting on rehabilitation (all directors of provincial health offices, provincial hospitals, heads of hospital rehabilitation units, heads of PRSCs, and department heads in MOH. This annual meeting uses about half of CMR's annual budget.

Both the CMR and DHR have a leadership role in rehabilitation, but the governance and accountability structures require further clarification. This is especially true for rehabilitation services within provincial hospitals; especially in the presence or absence of provincial (medical) rehabilitation sub-centers (PRSCs).

When asked the difference between CMR and DHR roles, responses included, '*DHR is macro and CMR is technical*', and '*DHR should provide the vision and CMR the implementation'*. These broad distinctions are helpful, but in order to effectively and efficiently lead the rehabilitation sector, further attention is needed to clarify roles and responsibilities within and between the DHR and CMR.

The MOH and the MOLSW each provide support for their respective rehabilitation centers (CMR/PRSCs under MOH, and Ban Koeun under MOLSW). There is no evidence of interagency coordination for these centers, efforts towards treatment or equipment standards, or systematic communication.

Rehabilitation Governance Documents

MOH Agreements on:

- *Organization and Operations of CMR – (No. 1859/MOH) 04 Aug 2016*;
- *Organization and Operation of DHR – (No. 2029/MOH) 20 Sept 2017*; and
- *Establishment and Function of Provincial Medical Rehabilitation Sub-Centers in Oudomxay, Xiengkhouang, Luangprabang, Savannakhet, and Champasak – (No. 2858/MOH) 27 Nov 2017*.

Outline the purpose, location and roles, responsibilities, rights, organizational structure, civil servants structure, functions and principles of each of these structures. These are solid foundational documents that merit review to ensure consistent messaging. (For example: One function of PRSCs, described in Section 3.13, reads: '*monitor, inspect and evaluate the activities of rehabilitation across the central, provincial and district hospital*'. This may merit review, as it seems this may be the role of CMR or DHR.)

The *Lao PDR National Rehabilitation (Medicine) Strategy 2018-2025* is modeled after key components of *Rehab 2030* (No. 2217/MOH) 10 Oct 2018. The six strategic objectives to scale up rehabilitation are:

1. Update governance, policies and information related to rehabilitation medicine;
2. Increase financing for rehabilitation;
3. Broaden integration of rehabilitation medicine into the health sector;
4. Develop a capable multidisciplinary rehabilitation medicine workforce;
5. Strengthen and expand the habilitation and rehabilitation services network;
6. Collect rehabilitation medicine data and support research.

The MOH has not yet publicly launched nor disseminated the *Strategy*.

The *Agreement on Appointment of Committee Responsible for Implementing National Strategy on Rehabilitation* (No. 2502 / MOH) 01 Oct 2018. This committee has not yet been activated, nor have specific terms of reference been developed.

The MOH also has a *Mental Health Strategy by 2020*, signed in 2012 but not yet implemented.[24]

Planning to Expand Rehabilitation

The MOH Department of Health Personnel (DHP) has identified ideal PT staffing projections (~3 staff) for provincial hospitals (16% of hospital beds; formula used for *other* category of health staff) and 1 PT per district hospital. Rehabilitation interventions at each level of health service have not been well defined.

Regulatory Mechanisms

Regulations specific to the rehabilitation workforce are not apparent. WHO convened a *Health Professionals Education Reform Consultation Meeting* in August 2017, but this meeting did not address the rehabilitation workforce. According to the Law on Health Care (Article 34, in-service training) all health care professionals are required to continuously improve their knowledge and skills. Law regulates continuing professional education but it has not been implemented. Licensing for doctors, nurses and dentists is being launched in 2019, but these standards do not yet apply to physical therapists.

CBM has supported minimal practice standards for the treatment of clubfoot at CMR and PRCs. The only evidence of quality control for assistive products is CMR's work on creating service standards for lower extremity prosthetics (2019).

There is no regulation on assistive products, and there are multiple avenues through which assistive products are available.

[24] CBM (2016). Report from Central East Asia Regional Mental Health Assessment.

The MOH has not yet created a Priority Assistive Products list, nor is there any evidence of how assistive products may be integrated into the *Medical Products Procurement and Supply* within the MOH Food and Drug Department.

Summary of Rehabilitation Governance Situation

- **The MOH has demonstrated a commitment to rehabilitation.**
- **Leadership and governance is provided through two key MOH structures: the Department of Health Care and Rehabilitation (DHR) and the Center for Medical Rehabilitation (CMR). MOH has provided written guidance on the organization and operation of each structure, but areas of overlap exist.**
- **MOH has developed multiple guidance and policy documents related to rehabilitation. These documents provide a solid foundation, but have yet to be operationalized. Further, these documents may merit review in light of the evolving regional and international developments related to rehabilitation.**
- **MOH and MOLSW support their respective rehabilitation centers. There is little evidence of collaboration between these ministries for these centers or for medical rehabilitation.**
- **Aside from preliminary PT staffing projections at provincial / district hospitals, there has been very little guidance for rehabilitation service planning. Rehabilitation interventions to be delivered at each level of health service have not been well defined.**
- **Regulatory mechanisms/licensing for doctors, nurses and dentists are emerging, but have not yet been established for the rehabilitation workforce.**
- **Assistive products are largely unregulated. The government has no guiding frameworks for the procurement and provision of assistive products; a list of Priority Assistive Products has not been developed; and there is very little government engagement aside from limited attention to P&O standards and wheelchair procurement within the CMR.**

4. Rehabilitation Information

Key Components	Status
Data on Disability, Rehabilitation Needs, and Population Functioning	*Limited*. The 2015 census included questions on disability using the Washington Group short form. Data on NCDs, ageing population and road traffic crashes may suggest a need for rehabilitation. There is no data about functioning.
Data on Availability/Utilization of Rehabilitation	*Limited*. DHIS2 collects data on role and location of PTs employed by the government. Data collected from service records on the utilization of rehabilitation often reflects number of treatments rather than number of service users.
Data on Outcomes, Quality and Efficiency of Rehabilitation	*Unavailable*. Data is primarily output-driven (treatments provided). There is no data available about rehabilitation service quality, efficiency and outcomes.
Data-driven Decision Making	*Mixed*. There is no research driving evidence-based practices in rehabilitation. The current HSDP has no indicators related to rehabilitation. Data on the under-utilization of rehabilitation services is, however, driving hospital decisions to close PT services and reallocate PT staff to other departments/sections.

Data on Disability, Rehabilitation Needs and Population Functioning

The fourth Lao PDR National Population and Housing Census (2015) utilized the Washington Group[25] Short Set of Questions. The census revealed that 160,881 people (2.8% of the population) over age five have a disability. Of this number, 18.4% with disability are over age 60.

Rehabilitation needs are closely correlated with health trends resulting in health conditions that can benefit from rehabilitation. Available data on NCDs, ageing populations and road traffic crashes can inform estimations on rehabilitation needs. Lao PDR has no precise figures on rehabilitation needs.

To attain reliable information regarding how well a population is functioning, the government must integrate a detailed 'functioning module' into a health survey or where possible, undertake a dedicated functioning and disability survey[26]. To date, Lao PDR has not collected data on population functioning.

Data on Availability /Utilization of Rehabilitation

In December 2017, the MOH issued a ministerial directive endorsing the District Health Information System2/Health Information System (DHIS2/HIS) as the official national information

[25] http://www.washingtongroup-disability.com

[26] The WHO has developed the Model Disability Survey. This is a comprehensive survey tool that can be used to understand the functioning of all the population. There is also a brief version of the Model Disability Survey that can be integrated as a module into a national survey for health or other focus area.

system through which all programs are requested to report. HIS/DHIS2 has evolved into the national integrated health information platform that directly collects routine data for nine programs and subprograms, and provides a repository for additional data on human resources, health insurance and some national key surveys. Although data is available for the government PT workforce, the platform for rehabilitation data remains largely undeveloped and there is little evidence of DHR initiatives to address this.

At rehabilitation service level, data is predominantly output driven, focusing on the types of treatment modalities (electrotherapeutic, light, thermal or ultra-sound) used during the session. There is little evidence of standardized data collection or data collection tools across hospitals. There is inconsistency in what is being counted (number of people served or number of modalities applied). Without clarity and consistency in reporting, it is difficult to understand or compare service utilization across facilities.

Data on Outcomes, Quality and Efficiency of Rehabilitation

There is no evidence of research or data collection on rehabilitation outcomes or quality and efficiency of treatment.

Data-driven Decision Making

As at March 2019, there is limited rehabilitation data available within DHIS2 to inform decisions and ad hoc monitoring and evaluation of rehabilitation. That said, hospital level data reflecting underutilization of PT services is leading to questions about cost effectiveness of the need to continue the service. Examples:

Hadxaifong District Hospital – From 1990-2008 the hospital had 2 PTs providing rehabilitation services. A hospital committee voted to stop the service in 2008 due to underutilization. It was not cost effective to retain the service (3-5 patients per month) and the PTs were reassigned to reception and administration.

Discussion with CMR management – *"Four provinces[27] are thinking to stop PT services as no patients are coming and it isn't useful to have staff who are not working; they want to allocate PTs to other services.*"

[27] The provinces are Attapeu, Luang Namtha, Phongsali, and Xekong.

Savannakhet Provincial Hospital – There are two PTs assigned to the service and it was reported that not more than two outpatients per day come for treatment. There were no patients on the day of the visit.

Summary of Rehabilitation Information

- **The MOH has adopted DHIS2/HIS and information on the PT workforce in government hospitals is available through this system. A platform for rehabilitation information is available within DHIS2, but has yet to be populated.**
- **There is very limited information on rehabilitation needs in the country; anecdotal linkages can be established with different health conditions, but this is insufficient to support rehabilitation planning.**
- **Service level data collection focuses on counting types of treatments provided. There is no data collected on outcomes, quality, or efficiency of rehabilitation services.**
- **Data from some district and provincial hospitals reveals underutilization of PT services. This data informs decisions related to hospital services and staffing, and has, in some cases, resulted in the suspension or discontinuation of the PT service.**

5. Rehabilitation Financing

Key Components	Status
Rehabilitation Expenditure	*Limited/Unknown*. MOH provides an annual budget for CMR and allocates funds for specific projects. Rehabilitation budget within hospitals is unknown.
Assistive Product Expenditure	*Limited*. There are limited types of assistive products in the MOH rehabilitation centers and these are subsidized by COPE.
Out-of-Pocket Costs for Rehabilitation	*Variable*. Rehabilitation centers provide the available assistive products for free, but charge for PT services.

Health Care Financing

Government health expenditure in Lao PDR has steadily increased over the past ten years. Domestic allocation for health was 5.9% in 2016, which falls short of the target of 9% of general government spending. External funding for health amounted to 20% of the total health expenditure in 2016.[28] Key developments related to health financing are the roll-out of an essential health service package (EHSP) and the design and roll-out of a national health insurance (NHI) model. The EHSP does not make specific mention of rehabilitation services.

Rehabilitation Expenditure

Lao PDR is able to disaggregate health expenditure according to 10 main health conditions and also by type of providers. It is not able to calculate expenditure specific to rehabilitation, as these costs are part of the overall hospital budget (staff, equipment, operational costs).

That said, the rehabilitation centers under MOH and MOLISA each receive annual budgets from their respective ministries.

The CMR annual budget is approximately 465M LAK[29] (~$53,800USD). Almost half of this budget (~200M LAK) is used for CMR's annual meeting on rehabilitation. This meeting brings together all directors of provincial health offices, provincial hospitals, heads of hospital rehabilitation units, heads of PRSCs, and department heads in MOH to share information about rehabilitation in Lao PDR. CMR's CBR Project uses 147M LAK (~$17,000 USD) for forty villages in four districts in Khammouan Province. CMR also submits funding requests for specific projects:

- In the 2016 budget, CMR received 3BN LAK (~$350,000USD) for new building construction in CMR.
- In 2018 there was 67M LAK (~$7,700USD) allocated to researching equipment available in rehab units in provincial hospitals (primarily in northern Laos) and also a few district hospitals.
- CMR hopes to receive support for a mobile workshop in the 2020 budget.

[28] WHO (2018). Overview of Lao Health System Development 2009-2017.

[29] 1 US Dollar is equivalent to 8,630 LAK.

The Ban Koeun rehabilitation center has received extensive support from the Government of Vietnam. Total budget for Vietnam cooperation is ~48 Billion VND[30] ($2 million USD). Ban Koeun reports that funds are "nearly finished". Vietnam provides support for building and machines while Lao PDR pays for consumables. Ban Koeun's annual budget from MOLSW is 800M LAK ($93,000) with 50% for materials and 50% for food/accommodation for patients. This does not include staff budget. All staffs are government staff and this is from a different budget line.

Assistive Product Expenditure

Aside from budgets provided to the rehabilitation centers, Lao PDR MOH does not have a specific budget line for assistive products.

There is extensive external funding from development partners for the supply of assistive products (wheelchairs) and raw materials to produce assistive products (prostheses, orthoses, mobility aids and seating/positioning systems). In 2011 and 2016 COPE-CMR conducted cost calculation studies for P&O services and defined the latest prices for P&O products. In 2018, ICRC provided training to MOH to conduct a rehabilitation center cost calculation. Two PRSCs (Luangprabang and Xiengkhouang) have completed this process.

Out-of-Pocket (OOP) Costs for Rehabilitation

According to the 2015–2016 National Health Accounts, OOP expenditure as a proportion of total health expenditure, although on a downward trend, still remains high at 45%.[31] In response to this, the Lao PDR government rolled out various social health protection schemes, all of which seek to increase utilization of health-care services and provide financial protection to families. Since 2016, one single National Health Insurance scheme has been introduced aimed at reducing fragmentation among existing schemes. As of the end 2017, NHI has been rolled out to cover 92% of the population; NHI is not yet available in Vientiane Capital.

Assistive products from the rehabilitation centers are free of charge. Conversely, the rehabilitation centers in Vientiane Capital do not accept any insurance and only cash payments are accepted for PT services and patients must pay each time they come for treatment.

[30] 1 US Dollar is equivalent to 23,220 VND.

[31] Ministry of Health (2017). National Health Accounts 2015-2016. Vientiane: Ministry of Health.

- Cost of PT service varies:

Stroke

- 20,000 LAK/session
- (~$2.30 USD)

Musculoskeletal

- 30,000 LAK/session
- (~$3.50 USD)

Pediatric

- 10,000 LAK/session
- (~$1.17 USD)

After hours for any service

- 40,000 LAK
- (~$4.70 USD)

Costs for rehabilitation services in the hospital range from

- 10,000-20,000 LAK/session

Summary of Rehabilitation Financing Situation

- **Lao PDR (MOH and MOLSW) each allocates annual budgets for rehabilitation centers. Outside of this, there is no specific budget line for rehabilitation or assistive products.**
- **Actual costs to provide rehabilitation services are unknown, but development partners are supporting cost calculation exercises (these focus primarily on P&O provision).**
- **NHI and EHSP are positive developments in Lao PDR and further work is needed to encourage rehabilitation services as part of the EHSP.**

6. Rehabilitation Human Resources and Infrastructure

Key Components	Status
Multi-disciplinary Workforce	*Very limited*. In Lao PDR there is one doctor specialized in rehabilitation medicine, less than 20 Cat I & II P&O workers and over 1,300 trained in physical therapy. There is no occupational nor speech language therapists in Lao PDR.
Workforce Training	*Limited*. Physical Therapy training has been offered in Lao PDR since 1968; a 4-year bachelor-level program began in 2014. P&O training support from Vietnam and Cambodia; a 3-year P&O training program was launched in Lao PDR in 2013.
Workforce Planning	*Limited*. MOH Department of Health Personnel has developed PT workforce projections. Data on rehabilitation workforce needs is not available.
Rehabilitation Infrastructure	*Limited / variable*. CMR and PRSCs are generally well equipped with adequate treatment space. Central hospitals have limited treatment space but abundant modality machines (light, thermal, electrotherapeutic, or ultra-sound).

Multi-disciplinary Workforce

Physical Medicine and Rehabilitation Specialists

There is one doctor with specialty training in rehabilitation medicine. She is serving as a Deputy Director General in the MOH Health Care and Rehabilitation Department and not engaged in clinical services.

Prosthetists and Orthotists

Prosthetists and Orthotists work almost exclusively in the six rehabilitation centers in Lao PDR. There are 55 P&O staff: less than 10% are women (n=5) and nearly 50% are bench workers (n=27).

Table 2. Prosthetic/orthotic staffing (Ban Koeun, CMR and PRSCs)

Location	Male	Female	Cat I PO	Cat II PO	Cat II P	Cat II O	Diploma PO	Bench worker	TOTAL
Ban Koeun	15	1	-	3	1	2	-	10	16
Total MOLSW	15	1	-	3	1	2	-	10	16
CMR	13	1	1	1	1	1	3	7	14
Luangprabang	7	1		1			5	2	8
Xiengkhouang	7	0				1	3	3	7
Savannakhet	3	1		1			1	2	4
Champasack	5	1	1	1	1			3	6
Total MOH	35	4	2	4	2	2	12	17	39
TOTAL LAO PDR	50	5	2	7	3	4	12	27	55

Cat I PO: 4-year training in prosthetics and orthotics
Cat II PO: 3-year training in prosthetics and orthotics
Cat II P: 18-month training in prosthetics
Cat II O: 18-month training in orthotics
Diploma: 3-year course provided in Lao PDR
Bench worker: All other staff; mixed levels of training and experience.

Physical Therapists

Physical therapists represent the bulk of the Lao PDR rehabilitation workforce. There are three PT qualifications in Lao PDR: bachelor degree, associate degree, and diploma level. PTs are practicing in hospitals, rehabilitation centers, in private clinics and in their homes. At the end of 2018, there were 366 PTs employed full time by MOH; 88% (n=322) are providing direct patient care[32]. There is limited data on contract or volunteer PTs within the MOH system, and no data numbers of PTs in private practice. There is no PT Association. HI and FMT have supported "PT Technical Exchanges" to promote dialogue.

Table 3. Physical therapists employed full time by the MOH

No.	Province/Location	Education Institution			Administration			Health Function			TOTAL		
		M	F	Total	M	F	Total	M	F	Total	M	F	Total
1.	Central Level	5	11	16	2	2	4	50	86	136	57	99	156
2.	Vientiane Capital	-	-	-	-	1	1	6	21	27	6	22	28
3.	Khammuane	1	-	1	-	1	1	4	7	11	5	8	13
4.	Champasak	-	-	-	1	-	1	9	11	20	10	11	21
5.	Savanakhet	-	-	-	4	4	8	1	5	6	5	9	14
6.	Salavan	-	-	-	-	-	-	3	5	8	3	5	8
7.	Xiengkhuang	-	-	-	5	1	6	1	13	14	6	14	20
8.	Bokeo	-	-	-	-	-	-	-	2	2	-	2	2
9.	Bolikhamsay	-	-	-	1	-	1	4	9	13	5	9	14
10.	Phongsaly	-	-	-	-	2	2	-	3	3	-	5	5
11.	Vientiane Province	-	-	-	-	-	-	5	18	23	5	18	23
12.	Huaphan	-	-	-	-	-	-	5	8	13	5	8	13
13.	Luangnamtha	-	-	-	-	-	-	2	3	5	2	3	5
14.	Luangprabang	-	-	-	-	-	-	6	7	13	6	7	13
15.	Oudomxai	-	-	-	-	-	-	4	4	8	4	4	8
16.	Attapue	1	-	1	1	-	1	3	-	3	5	-	5
17.	Sekong	-	-	-	-	-	-	-	2	2	-	2	2
18.	Saysomboun							2	1	3	2	1	3
19.	Sayabury	-	-	-	1	-	1	6	6	12	7	6	13
20.	Grand total	7	11	18	15	11	26	111	211	322	133	233	366

[32] Information consolidated from DHIS2 data.

In addition to the data provided through DHIS2, Ban Koeun and CMR also provided PT staffing data[33].

Table 4. Physical therapists employed in rehabilitation centers

Location	Male	Female	Bachelor	Associate	Diploma	On-the-job	TOTAL
Ban Koeun	-	14	-	1	3	10	14
Sub-total MOLSW	-	14	-	1	3	10	14
CMR	11	45	-	47	9	-	56
Luangprabang PRSC	5	7	-	5	7	-	12
Xiengkhouang PRSC	1	13	-	8	6	-	14
Savannakhet PRSC	4	5	-	1	8	-	9
Champasack PRSC	1	11	-	5	7	-	12
Sub-total MOH	22	81	-	66	37	-	103
TOTAL LAO PDR	22	95	-	67	40	10	117

Other Rehabilitation Professions

Occupational therapy (OT) and speech and language therapy (SLT) professions do not yet exist in Lao PDR. There are no qualified Lao OTs or SLTs in the country, and no information about any individuals who are currently studying outside of Lao PDR for these qualifications. There are two Lao psychiatrists and one clinical psychologist in Lao PDR.[34] The number of rehabilitation nurses is unknown.

Workforce Training

Physical Therapy Pre-Service Training

From 1968 until 2008, physical therapy pre-service training was a 3-year certificate/diploma course and taught at the College of Health Sciences under the MOH. The University of Health Sciences (UHS) was established in 2008 and is responsible for training the health workforce. The Faculty of Medical Technology (FMT) is one of six Faculties within UHS[35] and provides pre-service training for PTs, P&O, radiology and laboratory technicians.

When UHS began FMT in 2008, the 3-year associate degree in PT was introduced; in 2014, the 4-year bachelor degree was launched. UHS/FMT is the only institution in Lao PDR offering

[33] The author was unable to confirm if DHIS2 PT workforce data includes those working in CMR and PRSCs.

[34] CBM (2016). Report from Central East Asia Regional Mental Health Assessment.

[35] Other Faculties include nursing, pharmacy, dentistry, medicine/basic science, and post graduate public health.

professional entry-level education for physical therapists. The bachelor degree program is not internationally accredited[36].

The table below provides information on the degree programs and number of graduates. The yellow shading is information provided during the March 2019 interview with FMT while the blue shading is corresponding information from the 2015 Llewellyn report[37].

Table 5. Physical therapy pre-service training program summary

Degree level	Years	Time-Frame	Graduates Total/Female	2019 Graduates	Course Status
Certificate/Diploma*	3	1968-1981	~138	N/A	Discontinued
Certificate / Diploma	3	1981-2011	931 / 659	N/A	Discontinued
Associate-Bridging[38]	1.5	2011-2019	128 / 121	25	Ending in 2019
Associate	3	2011-present	141 / 88	(~25?)	Continuing
Bachelor**	4	2014-present	28 / 24	29	Continuing
TOTAL			1228 / 892	79	2 programs
TOTAL including 1968-1981 diploma graduates			1,366	79	

* This row was not provided during FMT interview, but added to correlate with Llewellyn's findings.

** Bachelor program currently enrolled: 3rd year: 31 students; 2nd year: 35 students; 1st year 37 students

The total of **PTs trained as at end of 2019 is 1,445** (1,366 plus 79 graduates anticipated in 2019). Of that number 74% diploma (n=1069), 22% associate[39] (n= 319), and 4% bachelor (n=57). All pre-service training has been provided in Lao PDR. There are no foreign-trained nationals in physical therapy.

The current class capacity for PT training is ~60 (30 places each for bachelor and associate programs). The demand for PT training is roughly five times this amount. In 2018, 300 applicants selected PT bachelor program on UHS application; associate selection was not an option and will be added in 2019.

P&O Pre-Service Training

The P&O pre-service training scenario is complicated as there are many levels of pre-service training and many pathways to achieve these qualifications. In sum, records show that approximately **65 people have been trained in P&O (majority are Cat II)**; roughly half have received their training in Lao PDR. It is expected

[36] The FMT has requested, and received, budget from MOH to formally review the PT and P&O curriculum in 2019.

[37] Llewellyn, G. (2015) workforce report identified 1168 graduates from PT training programs during 1968-2014, with 91% (n=1069) of graduates holding a certificate/diploma before UHS was formed (2008). During the March 2019 interview, the FMT provided the information on graduates from 1981-2019.

[38] The bridging course is offered to diploma-level PTs with five-years of clinical experience.

[39] Associate figures are combined bridging course (10.5% n=153) and 3-year (11.5% n=166)

that **23 more will graduate by 2021**; 74% (n=17) are from FMT's P&O training program.

Prior to 2012, all pre-service training was provided outside of Lao PDR (primarily Vietnam and Cambodia). The Vietnamese Center for Orthopedic Technology (VIETCOT) offers Cat II training while the Cambodia School of Prosthetics and Orthotics (CSPO) offers Cat I, II and III. Scholarships came from many sources (ISPO, USAID, COPE, ICRC). There are records of at least ***37 individuals*** (32 Cat II) trained, or in training, outside of Lao PDR:

- As at 2015, there were 14 Lao graduates from CSPO (12 Cat II and 2 Cat I)[40].
- From 2011-2016 ICRC supported 8 people from Cat II training in VIETCOT.
- In 2012, Ban Koeun rehabilitation center sent 6 individuals to VIETCOT for Cat II training.
- In 2018, COPE sent two people to CSPO for Cat III training.
- From 2018-2021, ICRC is supporting 6 people for Cat II in VIETCOT.
- From 2018-2022, ICRC is supporting one woman for Cat I training in Bangkok (Mahidol University).

The P&O training program at FMT began in 2012 and is a 3-year associate degree. The curriculum is not internationally recognized[41]. As of March 2019, there have been ***27 graduates*** (10 graduated in 2015, and 17 graduates in 2017). The current course began in 2018 with ***17 students (to graduate in 2021)***. The program only has one group of students that continue the entire three years and then a new group begins. The 3-year program has 1 year of study at FMT and years 2-3 are mixed between FMT theory and CMR practice (placement). There are three instructors in the P&O Program; two at FMT and one at CMR ("Ki" – Cat I trained in Cambodia).

<u>Other Training</u>

There is a vast array of short courses provided for Lao health staff on rehabilitation-related topics. These are chiefly post-service training – continuing professional development (CPD). CPD is not mandatory for PTs and P&Os. Training courses range from 1 day to 8 weeks and have been offered within Lao PDR and in neighboring countries (primarily Thailand). CPD opportunities are available through development partners and Lao PDR government. Illustrative examples of short courses that have been provided:

- Medical management of low back pain, spinal cord injury and stroke (Thailand).
- Refresher course on management of clubfoot using the Ponseti method (Lao PDR)
- Basic and Intermediate wheelchair provision (Lao PDR).
- Fundamentals of rehabilitation medicine (Thailand).
- Training in basic techniques for speech and occupational therapy (Thailand).
- Pediatric PT interventions (Lao PDR).

[40] ISPO (2015). Prosthetics and Orthotics Impact Assessment Southeast Asia: Cambodia and Lao PDR.

[41] The FMT has requested, and received, budget from MOH to formally review the PT and P&O curriculum in 2019.

Workforce Planning

The MOH Department of Health Personnel (DHP) is responsible for workforce planning, recruitment and deployment[42]. It also proposes the MOH organizational structure in health centers in the provinces/ districts. DHP noted that rehabilitation is part of the discussion as they have been working to factor PRSCs into the Provincial Health Office structure. Related to rehabilitation staffing, DHP is projecting 3 PTs for provincial hospitals. This is based on 16% of hospital beds (the figure used for "other" category of health staff in hospitals). Currently there is only one rehabilitation unit functioning at district level[43], but the long-term vision would be to have 1 PT per district hospital. Quota is demand driven, if more rehabilitation positions are needed, DHR must drive this request (providing clear justification and evidence). Staffing norms for the rehabilitation workforce are expected in the future; currently, roles and responsibilities not yet defined.

Rehabilitation Infrastructure

There are no minimum standards developed regarding rehabilitation treatment space or essential equipment that is to be available at different levels of care.

From the limited exposure during this assessment[44], treatment space and available equipment available varies greatly between rehabilitation centers and hospitals. It appears the CMR and PRSCs have ample treatment space, therapeutic aids (to enhance manual therapies and exercises), and a wide array of treatment modalities (electrotherapeutic, light, thermal, and ultra-sound). Hospitals generally allocate space for beds upon which patients receive treatment modalities. The PT unit at the provincial hospital in Savannakhet was neither well equipped nor adequately set-up to provide patient care[45].

In March 2018, the CMR conducted research (primarily in Northern Lao PDR) on equipment available in rehabilitation units in provincial hospitals, and some district hospitals. Findings were used as basis for budget request in 2019 to have standard equipment[46] provided in each rehabilitation unit. Neither the research report nor the list of standard equipment was available for review.

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[42] Every year a determination of what quota, where ... with government approval – this is demand driven.

[43] Kham District Hospital in Xieng Khouang Province reportedly has two PTs providing rehabilitation services.

[44] The consultant visited CMR and one PRSC, one provincial hospital in Savannakhet, and 4 central hospitals.

[45] The PT room was small but clean and looked unused. There was no treatment mat, but a single bed was available. Reportedly, all available equipment was broken and the bathroom did not function.

[46] The standard equipment was based on CMR experience and anecdotal information (no evidence based research) on equipment used in well-equipped units in Xayabuli, Salavan, and Bokeo; eg. infrared, hot packs, and ultrasound.

A Summary of Rehabilitation Human Resources and Infrastructure

- **The rehabilitation workforce in Lao PDR comprises mainly PTs and P&Os. Over 1,300 PTs have been trained (to different qualification levels), but less than 25% (n= 322) have full time employment at MOH to deliver rehabilitation services.**
- **The upgraded training for PTs and P&Os at the Faculty of Medical Technology is a very positive step in workforce development. Achieving international accreditation for these programs would be a capstone in this effort.**
- **There is one doctor with specialty training in rehabilitation medicine and she is not serving in a clinical setting. The lack of physiatrists in Lao PDR may result in lack of referrals for rehabilitation and thus contribute to the under-utilization of rehabilitation services.**
- **The lack of SLT and OT professions in Lao PDR restricts the opportunity to utilize a team approach in addressing the holistic needs of an individual. This deficiency is most noticeable when working with individuals with complex needs (e.g. stroke/hemiplegia).**
- **Information on rehabilitation professionals working in mental health is limited, and the number of rehabilitation nurses is unknown.**
- **The MOH DHP is receptive to rehabilitation discussions and planning. DHR could use existing workforce information collected through DHIS2 to advocate for increased quota positions for the rehabilitation workforce, and also provide evidence on the need for rehabilitation at all service levels.**
- **The rehabilitation infrastructure (equipment and treatment space) varies widely, with rehabilitation centers generally better off than hospitals. Creating minimum standards for rehabilitation infrastructure at all levels of care is essential to equalize opportunity across settings. Aligning the proposed standards with evidence-based care would also contribute to more effective services and improved treatment outcomes.**

7. Rehabilitation Services

Key Components	Status
Rehabilitation at Tertiary and Secondary Hospitals	*Available*. All tertiary hospitals are based in Vientiane Capital and have rehabilitation units. Rehabilitation units are in all provincial hospitals (except Xaysomboun).
Rehabilitation at Primary and Community Levels	*Very Limited/Unavailable*. Although it may be a long-term vision, as at March 2019, rehabilitation is generally not a part of the district hospital structure. Community based rehabilitation has been supported in some provinces; on-going in one province.
Specialized Care	*Limited*. Limited specialized care in hospitals. There are five rehabilitation centers under MOH and one under MOLSW. These centers do not cover all provinces and specialize in prosthetics and orthotics provision.
Assistive Products	*Limited*. Prosthetics, orthotics, and some mobility aids are available at rehabilitation centers. Private pharmacies in large cities carry a variety of products (including hearing aids). Hospitals generally do not provide assistive products.
Rehabilitation Services	*Limited.* OT and SLT services are generally not available, but may be provided by PTs with some training in these areas. Inclusive eye health and mental health are available in some areas. Services for vision and hearing are limited.
Early Identification and Rehabilitation for Children	*Very limited*. Early identification is being piloted in some areas, but is not standard practice. Clubfoot care and rehabilitation for children is available at CMR and PRCs. Rehabilitation for school age children is generally not available.
Evidence-based treatments	*Unavailable*. Through observation and discussion, it appears that PT treatments follow a well-established routine (focused on modalities) with limited attention to evidence or outcomes.
Continuum of care	*Very limited/Unavailable*. Very little evidence on continuum of care within and between institutions.

Availability of Rehabilitation

In 2010, rehabilitation services within provincial hospitals were located under the Traditional Medicine Department[47]. This historical beginning continues to influence structures and staffing of rehabilitation units. For example, the rehabilitation unit in Mahosot Hospital is called "Acupuncture and Rehabilitation Department". The context within which rehabilitation services are provided may also determine the types of services that are offered (e.g. cupping and acupuncture are common services offered at central hospitals in Vientiane Capital).

[47] Information from discussion with MOH DHP.

Tertiary care facilities in Lao PDR consist of five hospitals and three specialized centers, all in Vientiane Capital. Four of eight tertiary care facilities were visited (*) during the assessment. All offered rehabilitation in their facility, and included in-patient and out-patient services.

- Setthathirat Hospital
- Mahosot Hospital* (in addition to rehabilitation, the hospital also has a mental health unit)
- Mittaphab Hospital* (specializes in ortho trauma and neuro surgery)
- Children's Hospital* (has child development clinic – not a rehabilitation unit)
- Mother & Child Hospital
- Center for Medical Rehabilitation* (P&O, wheelchairs, ortho-surgery, long-term care)
- Dermatology Center
- Ophthalmologic Center

There are 17 provinces in Lao PDR and all provincial hospitals except Xaysomboun have a rehabilitation unit. From discussions with CMR, it appears that four provinces (Attapeu, Luang Namtha, Phongsali, and Xekong) have under-utilized rehabilitation units. Consequently, the provincial hospitals are reviewing the cost effectiveness of retaining these units versus re-allocating/re-assigning staff to other services.

It is not clear if there is a standard organizational framework for rehabilitation (departments or services) within hospitals. In Savannakhet, the PT services are located within the internal medicine department. The two PTs receive little support or supervision. Although one of the doctors in the surgical ward received a short course on rehabilitation medicine, he uses this to advise patients in his ward and has no direct oversight or managerial linkages with the PT service. Reportedly, the PRSC is expected to provide technical support to the provincial hospital PTs, but detailed guidance on this is underdeveloped.

In general, there are no rehabilitation services offered at district level[48]. CMR noted that there may be some PTs working at district hospitals, but it is unlikely that they are providing rehabilitation services.

CMR began community based-rehabilitation activities in 1988. Other organizations have supported CBR (e.g. CBM in Champasak and HI in Savannakhet), but the only on-going program is in Khammaune Province where CMR is supporting CBR activities in forty villages. The CBR program focuses on staff training and is oriented toward community based inclusive development.

COPE, in collaboration with CMR and the PRSCs, began mobile outreach clinics in 2015 to facilitate access to rehabilitation services (including P&O). As at March 2019, there have been 11 mobile outreach clinic camps in six provinces with more than 1000 people screened and 80% received services.[49]

[48] The exception in Kham District Hospital n Xieng Khouang Province, having a rehabilitation unit staffed with two PTs.

[49] Information by email from COPE on March 13, 2019.

Specialized Care

Mental Health

Mahosot Hospital in Vientiane capital houses a 19-bed mental health unit and 103 Military Hospital also has a mental health unit. They provide both in-patient and outpatient services. Few provincial hospitals have outpatient mental health services. BasicNeeds[50] has provided community mental health services in nine district hospitals in Vientiane province and 3 districts in Borikhamsay province.

Stroke

The Japanese government is supporting the construction of a specialized stroke unit in Mittaphab Hospital.[51] This unit is not yet complete and was not mentioned nor visited during the Mittaphab visit.

Rehabilitation Centers

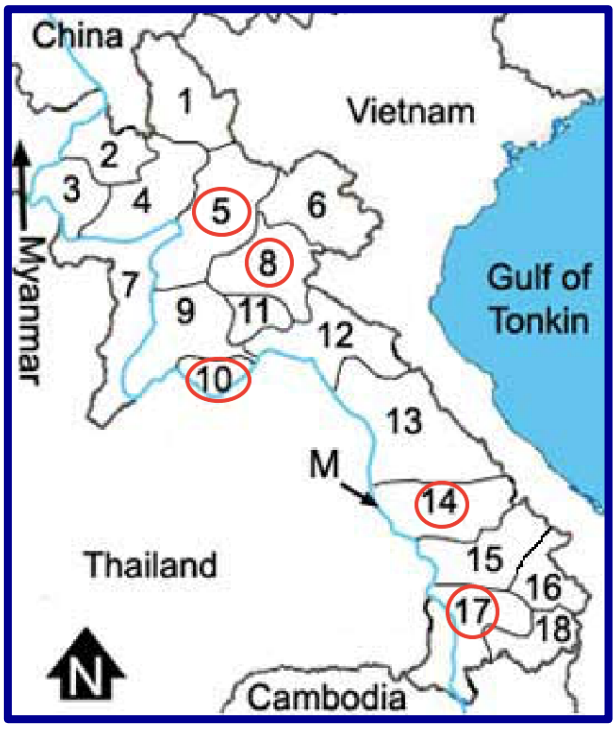
There are five rehabilitation centers under MOH (CMR plus four PRSCs) and one under MOLSW (Ban Koeun in Vientiane). The MOH centers and their locations in Lao PDR are provided in Figure 4. The Champasak and Luangprabang PRSCs are located within the provincial hospital while the PRSCs at Savannakhet and Xiengkhouang are located outside hospital compound.

Figure 4. Location of MOH rehabilitation centers (CMR and PRSCs)

Provinces (17 + Vientiane)

1. Phongsaly
2. Luangnamtha
3. Bokeo
4. Oudomxay
5. Luangprabang (PRSC)
6. Huaphanh
7. Xayaboury
8. Xiengkhuang (PRSC)
9. Vientiane province
10. Vientiane prefecture (CMR)
11. Xaysomboun
12. Borikhamxay
13. Khammuane
14. Savannakhet (PRSC)
15. Saravane
16. Sekong
17. Champasak (PRSC)
18. Attapeu

M = Mekong river



[50] A non-governmental organization.

[51] Information from discussion with development partners.

The majority of services offered at CMR and the PRCs are the rehabilitation related to, and provision of assistive products for, individuals with limb loss and paralysis. Assistive products include a range of prosthetics and orthotics as well as mobility aids (crutches, walking frames, wheelchairs and tricycles).

The rehabilitation centers also provide PT, OT, SLT[52] services for children with disabilities, and provide treatment for clubfoot using the Ponseti method[53]. In 2017, 88 children with clubfoot started Ponseti treatment in the MOH rehabilitation centers. In 2018, 291 children (168 boys and 123 girls) with clubfoot received Ponseti treatment in the CMR/PRSCs.

Adults with complex needs can receive OT services at CMR. There is a medium size OT room in the in-patient building where activity based exercises are provided and advice on how to use simple assistive products for feeding, drinking, self-care is also provided.

Finally, the CMR and PRSCs provide outpatient therapy for a variety of health conditions such as low back pain, paralysis (hemiplegia, paraplegia, peripheral nerve injury). In addition, the CMR has a 100-beds (shared between dormitory for those waiting for orthopedic products, and an in-patient ward for those with complex needs).

Assistive Products

Private pharmacies carry a variety of assistive products, but individuals must pay out of pocket. Rehabilitation centers provide prosthetics, orthotics, walking aids and a limited number of wheelchairs and tricycles – these are largely free of charge. Hospitals generally do not provide assistive products[54] but may have wheelchairs for use within the facility.

Table 5. Summary of assistive products provided at rehabilitation centers in 2018

Products	Ban Koeun	CMR	Luangprabang	Xiengkhuang	Savannakhet	Champasak	Total
Prosthetics/ Orthotics*	185	1056	597	193	130	223	2,384
Wheelchairs	20	540					560

* This may include repairs; there is no disaggregation of new clients and replacement products.

[52] CMR and PRC staffs have received short courses on basic OT and SLT techniques.

[53] Ponseti method is an evidence-based serial casting technique proven effective in correcting clubfoot deformity.

[54] The exception is Mittaphab Hospital in Vientiane. Wooden crutches are available in the hospital pharmacy. The pharmacy sells 80-100 crutches per month; insurance doesn't cover crutches – patients pay cash. Not all hospitals carry crutches in their pharmacy – depends on need. Mittaphab has them as they have big orthopedic department.

Rehabilitation Services

As mentioned previously in this report, observations within PT services at central and provincial hospitals revealed interventions that are predominantly modality-focused (electrotherapeutic, light, thermal, and ultra-sound).

Mittaphab Hospital Case Study

In the hospital organizational chart, the rehabilitation department is named the Traditional Medicine Department.
A medical doctor with specialization in traditional medicine heads the department; the deputy is a PT. There are 20 staffs (5 acupuncture, and 15 PTs – no bachelor-level PTs). Three people received 3-weeks training on speech in 2017; in 2018, one person went to Japan for 1 month to focus on SLT and OT.

There are about 60 patients /day (30 in-patient and 30 outpatient) and approximately 1,000 cases per month.
~50% are covered by insurance and 50% are cash payments. Price lists are posted on the wall (modalities are ~10,000 LAK per treatment).

The reception in the outpatient department collects payment (insurance and cash) and a yellow book that has the assessment summary (no standard form – blank page for narrative); unclear who makes the assessment. From there, patients are sent to the specific room(s) for treatment. Staffs remain in their respective room and deliver treatment according to what is prescribed.

There are three treatment rooms, each with its own logbook:
- Equipment room (3 PTs) – logbook with columns: name/ultra sound/Tens/Hot/Cold/diagnosis.
- Acupuncture room (4 staff) – logbook with columns that include acupuncture/ cupping/ IR
- Massage room (5 PTs) – logbook with name/age/village/district/ province/ diagnosis

This accounts for 8 PTs and 4 staff; other staffs work within the different wards to deliver PT.

It was not evident that there was documentation on outcomes of treatment.
It appears that, for the outpatient department, the focus is delivering and documenting modalities of care.

Mahosot Hospital Case Study

In Mahosot Hospital, the head of the PT service evaluates the patient and prescribes the treatment. The patient then goes to hospital reception to make the payment and returns to PT with proof of payment. The PT receptionist indicates the type of treatment in a logbook and then notifies an available PT in the department to give the treatment. No other documentation is made and when the treatment is finished the patient returns to reception to schedule another appointment.

Another challenge is related to compiling data on the number of PT services. Some providers count the number of treatment sessions while others count the number of individuals. Without a standard process, it is difficult to compare numbers or get accurate figures.
Table 6 illustrates this challenge.

Table 6. Summary of PT treatments at rehab centers in 2018

LOCATION	PHYSICAL THERAPY
Ban Koeun	1500 treatment sessions
CMR	No information
Luangprabang PRSC	872 clients
Xiengkhouang PRSC	5388 treatment sessions
Savannakhet PRSC	617 clients
Champasack PRSC	6264 treatment sessions
TOTAL	Difficult to tally

Rehabilitation for Children

The main facilities supporting early childhood development activities include: Vientiane Children's hospital, Mahosot hospital, Mother Newborn hospital, Pediatric Unit of CMR and Luang Prabang Children's hospital.

The Children's Hospital in Vientiane has a Child Development Center (CDC) – supported by HI. There are six people in the CDC (3 doctors, 2 PTs, 1 nurse). The CDC treats ~5-6 children /day. There is a patient file for each child (drawers of 300-400 hard copy files). The CDC team helps with screening at the vaccination clinic within the Children's hospital.

Advances in early childhood development:

- Newborn screening tool developed and now used at Mahosot & Mother and Newborn Hospitals; database/tablet collection system developed for referral and case management (used by the 2 Pediatric Hospitals listed above)
- Technical guideline for newborn screening (in Lao; in the process of being endorsed by the President of the Pediatric Association; dissemination plans being developed).
- Case Management Guideline for Early Detection & Intervention within Children's Hospital (in Lao; has been disseminated within the Children's Hospital-all departments).
- Maternal Child Health Handbook has child development integrated into the content.

Evidence-based treatments

At FMT, instructors are not required to conduct or publish research. It is up to the individual instructors to propose research (first to FMT and FMT forwards to Ministry of Technology and Science). Research is generally not conducted without government funding. PT associate and bachelors programs require a thesis; associate is a 'mini-thesis' (more like a report), while bachelor thesis is grounded on research.

Research was a topic of the *rehabilitation workforce focus group* discussion. Two PTs conducted research for their associate degree; one medical doctor from CMR proposed research on stroke rehabilitation, but it wasn't approved by the Ministry of Technology and Science; and one PT from Hospital 103 is on stroke rehabilitation – this began in 2018, in collaboration with a hospital in Vietnam, and is on-going.

Within the hospital, PT treatments appear to follow a well-established routine (focused on modalities) with limited attention to dosage, outcomes or evidence on the efficacy of modalities used. Through interviews with service users, the majority using hospital PT services indicated that no specific treatment goals were established and 'discharge' is self-determined (the patient will decide when they have had enough treatments and stop coming).

Continuum of care

In Lao PDR, rehabilitation at community and district health care levels is extremely limited. Referrals to rehabilitation centers are supported through COPE's outreach program (available in some provinces). There are referrals from central hospitals to CMR, but referrals ad hoc and there was no evidence of clear protocols or guidance on referral pathways.

Summary of Rehabilitation Service Availability and Quality

- **In Lao PDR, rehabilitation is offered primarily at central/ provincial hospitals and in rehabilitation centers. In general, MOH does not provide rehabilitation at district hospitals. There have been efforts to provide service at community level through mobile workshops and CBR; these are limited in scope and geographic reach.**
- **Rehabilitation services are predominantly physical therapy treatments, characterized by use of treatment modalities (electrotherapeutic, light, thermal and ultrasound) as key interventions. OT and SLT interventions are rare; when offered, they are provided by PTs who have received supplemental training on these topics.**
- **Although the MOH rehabilitation centers focus primarily on prosthetic and orthotic provision, they provide physical therapy for neurologic, musculoskeletal, and pediatric cases (including clubfoot care) and a limited number / type of other assistive products.**
- **The low demand for PT services at provincial hospitals is troubling. This phenomenon is leading hospital management to review the need to retain this service or allocate PT staff to other departments. Underlying causes for limited patient numbers may stem from lack of information about the service, barriers (distance, transport costs), or the quality of treatments provided (little or no improvement in patient function).**
- **Rehabilitation research in Lao PDR is part of the PT bachelor degree program – topics were not reviewed. Research outside of the university is extremely limited. Application of existing global research (e.g. efficacy of different treatment modalities) is limited.**
- **Practices for early identification and early childhood interventions are emerging. Development partners and the children's hospitals in Vientiane and Luangprabang are leading these efforts. Pediatric rehabilitation is available at CMR and in most PRSCs.**
- **The continuum of care for rehabilitation is extremely limited, as rehabilitation at community and district levels is not yet developed. Referral pathways at central level are not formalized and specific guidance/referral criteria was not seen.**
- **In general, mobility-related assistive products are available at CMR and PSRCs and these are free of charge.**

8. Rehabilitation Outcomes and System Attributes

Key Components	Status
Available, Acceptable, Affordable	*Limited*. Rehabilitation is primarily available in large cities and the evidence of low demand may indicate that it is not of high value to the population. Assistive product expenditures and governmental rehabilitation expenditures are unknown.
Efficient, Effective	*Limited*. There is inadequate number, type and distribution of rehabilitation personnel in the country. There is little outcome measurement and no evidence-based models of care that support efficient delivery of rehabilitation.
Accountable	*Limited*. General governance structures for rehabilitation are in place, but lack of a specific focal point and clear reporting structure reduces accountability.
Sustainable	*Limited*. The value of rehabilitation in health care has not been well established. It is difficult to identify the total rehabilitation expenditure and there has been little analysis of financial sustainability.

Available, Acceptable, Affordable

Rural communities and district health centers have limited access to rehabilitation services. The MOH, with development partners, has supported mobile services and CBR programs, but these initiatives cover less than 50% of the country. Rehabilitation services are predominantly physical therapy treatments. There are no SLT nor OT graduates in Lao PDR, though OT and SLT services are managed by PTs who have received short courses in these areas. There are five MOH-supported rehabilitation centers in the country that concentrate on prosthetic/orthotic provision, but also offer a limited number and type of assistive products, and PT services for adults and children. PT services are available at almost all provincial hospitals, but underutilization of these services is triggering hospital management discussions on the need for, and cost effectiveness of, retaining these services. Assistive products are generally provided for free at rehabilitation centers, as development partners contribute to the cost of raw materials.

Efficient, Effective

As the rehabilitation workforce is principally PTs, there is little opportunity for a multi-disciplinary or holistic approach to patient care. There is little understanding about, or attention provided to, the efficiency or effectiveness of rehabilitation services. This is especially true for hospital-based PT services. The predominance of PT services appears to be the habitual use of modalities (electrotherapeutic, light, thermal, and ultra-sound) with little evidence of dosing parameters or outcome measures.

Accountable

The MOH actively supports rehabilitation, but the lack of a clear focal point impacts communication and effectiveness of program planning. The lack of regulatory structures and processes related to rehabilitation impacts overall accountability for the workforce, products and services provided. There is very little information collected about the quality, effectiveness or efficiency of rehabilitation.

Sustainable

Aside from specific budgets allocated to the rehabilitation centers, it is difficult to identify rehabilitation expenditure within the MOH budget. The in-country training for PTs and P&Os is a positive step. Crafting a pathway toward international accreditation for these programs and a pathway for establishing other rehabilitation professions in Lao PDR (OT and SLT) can augment the existing governmental investment.

Summary of Rehabilitation Outcomes and System Attributes

- **Rehabilitation coverage at community and district levels is very limited. Rehabilitation services are available at provincial and central hospitals but are mono-disciplinary (PT) and not conducive to holistic, person-centered care.**
- **Assistive products (primarily prosthetics, orthotics and a limited number and type of mobility aids) are available (free of charge) through five MOH-supported rehabilitation centers. Development partners contribute to materials costs and financial sustainability of this service has not yet been fully addressed.**
- **The MOH has a type of twin-tracked leadership structure for rehabilitation: one for technical aspects and one for general oversight. The lines between these two structures often overlaps and creates potential for inefficient communication.**
- **Regulatory measures for rehabilitation (workforce, products and services) are largely absent. There are some emerging initiatives but much more work needs to be done. Efficiency and effectiveness of PT services within hospitals is unknown. The quality of care provided may contribute to the evidence of service under-utilization in provincial hospitals.**

9. Lao PDR – WHO Rehabilitation Maturity Model Scores and Details

Key to scores:			**SCORE**		**JUSTIFICATION**
	Already present, no action needed		4		The RMM provides standard descriptive content for each maturity level. Overlap exists between levels. Rationale (justification) for the score describes the key attributes in the RMM that led to the selection of the score.
	Needs some strengthening		3		
	Needs a lot of strengthening		2		
	Very limited, needs establishing		1		
GOVERNANCE			**SCORE**		**JUSTIFICATION**
1	Rehabilitation has legislation, policies and plans			2	There is a national rehabilitation strategy.
2	There is coordination for rehabilitation			1	No inter-sectoral coordination for early childhood intervention and school-aged children.
3	There is planning to expand the delivery of rehabilitation			2	Small amounts of service planning have occurred.
4	The capacity and levers for rehabilitation plan implementation are in place			2	Poor adherence to strategic plan (not yet released).
5	There is accountability and reporting for rehabilitation			1	No accountability for performance of the rehabilitation.
6	There is transparency for rehabilitation			1	Rehabilitation decision-making processes are not transparent.
7	Rehabilitation is regulated			1	Regulation is non-existent for workforce and AP.
8	There is leadership, collaboration and coalition building for rehabilitation			2	Plan for a rehabilitation committee has been established.
9	Assistive Technology has adequate governance and procurement systems			1	Very little leadership across AT sector.
	9a.	*There is legislation, policies and plans*	1		No guiding frameworks; no Priority Assistive Product list.
	9b.	*There is effective procurement*	1		Government is not engaged in national procurement.
HEALTH INFORMATION SYSTEMS			**SCORE**		**JUSTIFICATION**
10	Information is generated about rehabilitation needs, including population functioning and disability			2	There has been inclusion of disability questions in a census but not comprehensive information about

				functioning.
11	Information is generated about the availability and utilization of rehabilitation services		2	Health information system exists and data is collected from services records, but rehabilitation data is limited.
12	Information is generated about outcomes, quality and efficiency of rehabilitation services		1	There is almost no research or data available about rehabilitation service quality, efficiency or outcomes.
13	Information is used to inform policy and programme decision making		1	No rehabilitation evidence, thus not used for decisions.
FINANCING		**SCORE**		**JUSTIFICATION**
14	Financing for rehabilitation covers all the population		1	Universal approach to health financing not yet achieved.
15	Financing for rehabilitation covers an appropriate range of prioritized interventions/services		1	Rehabilitation is not included in primary care, and a very limited number of assistive products are included.
16	Financing for rehabilitation prevents financial hardship		2	There are fees for rehabilitation, but limited funds for support for transportation can be accessed.
WORKFORCE AND INFRASTRUCTURE		**SCORE**		**JUSTIFICATION**
17	There is adequate workforce available, it is sustainable and aligned to the market needs		1	Major deficits in the rehabilitation workforce; planning has been very limited and no clear identification of concerns.
18	The workforce is trained with appropriate skills to match tasks and meet need		1	Graduates and training courses are limited; regulatory mechanisms for rehabilitation professions are very weak.
19	The rehabilitation workforce is well managed and planned		2	There is a small amount of rehabilitation workforce planning.
20	The rehabilitation workforce is motivated and supported		1	Professional associations do not exist; weak/inactive.
21	There is appropriate rehabilitation infrastructure and equipment		2	Rehabilitation infrastructure in sub-centers is satisfactory.
SERVICE – AVAILABILITY		**SCORE**		**JUSTIFICATION**
22	Rehabilitation is available across hospitals		2	Rehabilitation is primarily through physical therapists.

	22a.	*Tertiary level*	2		Rehabilitation is available at all central hospitals.
	22b.	*Secondary level*	2		Rehabilitation is in most provincial hospitals.
23	Rehabilitation is available in primary and community care			1	Rehabilitation is not integrated into primary health care.
	23a.	*Integrated into primary healthcare*	1		Therapy services are not available in primary care facilities
	23b.	*Delivered in community settings*	1		75% of districts lack community delivered rehabilitation
24	Rehabilitation is available across all phases of care			2	Rehabilitation is provided for some health conditions
	24a.	*Acute*	2		PT services are available in some medical /surgical wards
	24b.	*Sub-acute*	2		Rehabilitation is available for sub-acute phase of care
	24c.	*Long-term care*	2		CMR /Sub-Centers offer rehabilitation in long-term care
25	Assistive Products are available			1	Very limited provision of AP; minimal government role
	25a.	*Assistive Products Range*	1		Less than 30 AP are available through government support
	25b.	*Assistive Product follow-up and maintenance*	1		AP is very poorly integrated across levels of healthcare.
26	Rehabilitation is available for adults with complex needs.			2	A small number of rehabilitation centers exist; programs exist to promote/support access to these services.
27	Rehabilitation is available for children with developmental delays and disabilities			2	There are some documented referral pathways, but these require a lot of strengthening.
	27a.	*Early identification and referral of children*	2		Evidence of newborn screening technical guidelines.
	27b.	*Rehabilitation in hospital and clinical settings*	1		Multi-disciplinary assessment and care not yet developed
	27c.	*Rehabilitation during early childhood*	2		CMR and some sub-centers offer specialized

					pediatric care
	27d.	*Rehabilitation during school age*	I		Very limited programs for children during school age years
28	Rehabilitation is available for target populations			I	No specialized rehabilitation services for target populations
SERVICE – QUALITY			**SCORE**		**JUSTIFICATION**
29	Rehabilitation is effective			I	No evidence-based standards/protocols are utilized
	29a.	*Evidence based approaches utilized*	I		No national clinical guidelines for effective practice
	29b.	*Effective and efficient dosage of rehabilitation interventions*	I		Appropriate use of equipment and dosage is a concern
30	Rehabilitation is timely and delivered along the continuum of care			I	Rehabilitation is not available at all levels of care
31	Rehabilitation is person -centered, it empowers and engages users, family, carers			2	Some understanding of user satisfaction through user survey (CMR and sub-centers)
32	Rehabilitation is convenient, and socially and culturally acceptable			2	Low demand for services; some actions taken to reduce the barriers (mobile outreach)
33	Rehabilitation is safe			I	No evidence of incident reporting in rehabilitation care
OUTCOME & ATTRIBUTES OF REHABILITATION			**SCORE**		**JUSTIFICATION**
34	Rehabilitation is accessible leading to good coverage of rehabilitation interventions			I	There is limited delivery of rehabilitation interventions, few rehabilitation professions, not at primary care levels
	34a.	*Rehabilitation is available to all who need it*	I		Rehabilitation is delivered in large hospitals in major cities
	34b.	*Rehabilitation is affordable to all who need it*	I		Rehab and assistive product expenditure reflects the many challenges to affordability
	34c.	*Rehabilitation is acceptable to all who need it*	I		Low demand for rehabilitation
35	Rehabilitation is equitable across levels of functioning and disadvantaged population groups			I	Equity analysis not performed regarding social stratifiers and almost no action taken to ensure access to services
3	Rehabilitation is efficient			I	Very inadequate distribution of rehab personnel

6					
	36a.	*Rehabilitation has allocative efficiency*	I		No evidence-based models of care
	36b.	*Rehabilitation has technical efficiency*	I		Case coordination inadequate; no outcome measurement
37	Rehabilitation is accountable			I	Governance structures for rehabilitation are not clear
	37a.	*Governing Agencies are accountable*	I		Low levels of accountability for rehabilitation outcomes
	37b.	*Service Providers are accountable*	I		Limited analysis of quality and effectiveness of care
38	Rehabilitation is sustainable			I	Value of rehabilitation in healthcare is not well established
	38a.	*Rehabilitation has financial sustainability*	I		It is difficult to identify the total rehabilitation expenditure
	38b.	*Rehabilitation has institutional sustainability*	I		Rehabilitation services are under-developed
	38c.	*Rehabilitation is resilient to crisis and disaster*	I		Limited experience/capacity for addressing rehabilitation in a disaster.

10. Strengths/Achievements and Remaining Challenges

Strengths and Achievements in Rehabilitation

- **The MOH supports rehabilitation and has invested in processes and structures to strengthen rehabilitation leadership and governance. Evidence is seen through the restructuring of the Department of Health Care and Rehabilitation, adoption of the National Rehabilitation Medicine Strategy (2018-2025), approval for a National Rehabilitation Committee and support for the Systematic Assessment of Rehabilitation Situation (STARS).**
- **The MOH has adopted DHIS2 as the foundation of its health information system and data about the PT workforce (numbers, locations) is available through DHIS2.**
- **MOH has provided an annual budget for the five rehabilitation centers.**
- **MOH has demonstrated its commitment to rehabilitation workforce capacity building through the establishment of a bachelor-level pre-service training program for physical therapy and a 3-year training program for prosthetists and orthotists.**
- **MOH has supported mobile outreach clinics in 11 provinces and CBR programs in a number of areas in an effort to extend rehabilitation services to communities.**
- **Physical therapy is available within provincial and central hospitals and within the five rehabilitation centers supported by MOH.**
- **Assistive products (prosthetics, orthotics and some mobility aids) are available and free of charge in the five MOH-supported rehabilitation centers.**
- **There is emerging interest in, and attention to, early childhood development and early identification of disabilities. The Child Development Clinic in Vientiane's Children's Hospital has been operational since 2015.**
- **The enabling environment in Lao PDR is conducive to furthering rehabilitation. There are a number of committed development partners and donors for rehabilitation. In addition, Lao PDR has access to numerous regional technical resources for rehabilitation workforce**

Remaining Challenges in Rehabilitation

- **The MOH rehabilitation leadership structure is divided. Technical leadership is provided by the Center for Medical Rehabilitation (CMR) while general rehabilitation oversight is the purview of the Department of Health Care and Rehabilitation. One clear focal point for rehabilitation has yet to be identified. Until this occurs, reporting and accountability within the sector will remain in flux.**
- **The MOH has approved a number of guidance documents, policies and governance structures related to rehabilitation but they have yet to be launched or operationalized.**
- **DHIS2 contributes data on PT workforce locations, but is greatly underutilized related to rehabilitation data.**
- **The modest budget for the CMR does not include coverage for assistive products as development partners continue to provide raw materials. Without clear information on actual costs, it is difficult for MOH to identify funding needs.**
- **The PT and P&O training program curricula are not internationally recognized or accredited. Without assurance of adequate training standards the workforce may not have adequate knowledge or skills to deliver effective services. In addition, without mandated and enforced continuing professional development, evolving evidence-based practices will not be incorporated into patient care.**
- **The absence of key professions in the rehabilitation workforce (namely occupational and speech therapies) limits a comprehensive and holistic approach to patient care.**
- **The number and type of assistive products available in Lao PDR is limited. The MOH has not yet established a priority assistive products list (APL), or guidelines on the procurement and provision of assistive products.**
- **Rehabilitation services at community and district levels are extremely limited and not yet incorporated into the MOH health service delivery structure.**

11. Recommendations

1. Operationalize existing rehabilitation policies and frameworks

It is recommended that the MOH:

1.1. Review and launch the National Rehabilitation Committee (approved in October 2018). This Committee provides a neutral platform for discussion and an opportunity to address issues related to rehabilitation across all health system building blocks.

1.2. Distribute the *National Rehabilitation Medicine Strategy (2018-2025).* Awareness of the Strategy may encourage stakeholder dialogue and create opportunities for programmatic synergy.

1.3. Apply STARS findings, content of the *National Rehabilitation Medicine Strategy (2018-2025*), and existing WHO rehabilitation indicators to develop a monitoring and evaluation pathway / tool for rehabilitation in Lao PDR.

2. Consolidate rehabilitation leadership and coordination

It is recommended that the MOH:

2.1. Utilize the National Rehabilitation Committee as the key coordinating body to lead and regulate all aspects of rehabilitation planning and implementation.

2.2. Identify a specific focal point for rehabilitation with clear reporting structures and decision-making capacities. This will streamline communication and reduce potential for duplication.

2.3. Revise documentation on roles and responsibilities of the Department of Health Care and Rehabilitation, Center for Medical Rehabilitation, and the Provincial Rehabilitation Sub-Centers.

2.4. Revitalize discussions with the National Committee for Disabled People and Elderly to create synergies and standards between rehabilitation centers and within the rehabilitation sector.

3. Augment rehabilitation data collection for effective planning and decision-making

It is recommended that the MOH:

3.1. Review the DHIS2 platform and recommend changes to include rehabilitation-related data.

3.2. Consider adding rehabilitation indicators in the forthcoming Health Sector Development Plan.

3.3. Develop and promote outcome measures in data collected at service level.

4. Allocate resources for rehabilitation services across all levels of health care

It is recommended that the MOH:

4.1 Support cost calculation initiatives for rehabilitation services to inform budget requests.

5. Upgrade physical therapy and prosthetic/orthotic pre-service training to international standards

It is recommended that the MOH (through the UHS-Faculty of Medical Technology):

5.1. Encourage collaboration with World Confederation for Physical Therapy (WCPT) and the International Society for Prosthetics and Orthotics (ISPO) to support physical therapy (PT) and Prosthetic & Orthotic (P&O) curriculum review.

5.2. Strengthen clinical education learning experiences.

6. Strengthen the capacity of the rehabilitation workforce

It is recommended that the MOH:

6.1. Support scholarships for PT, speech and language therapy (SLT), occupational therapy (OT), and specialization in PMR training at internationally accredited schools.

6.2. Ensure that positions within the MOH structures are created for returning graduates.

6.3. Establish regulatory mechanisms for rehabilitation workforce licensure.

6.4. Develop /provide continuing professional development programs and opportunities.

7. Address the under-utilization of PT services within the MOH centers, units and hospitals

It is recommended that the MOH:

7.1. Identify causes of under-utilization and develop mitigation strategies.

8. Prioritize evidence-based care and treatment outcomes in rehabilitation service delivery

It is recommended that the MOH:

8.1. Create a task force to review current treatment practices against existing evidence and international practice standards and advise on course modifications as needed.

9. Establish guiding frameworks related to procurement and provision of assistive products

It is recommended that the MOH:

9.1. Solicit support from WHO to begin steps toward developing a Priority List of Assistive Products for Lao PDR together with guidance on procurement and provision.

10. Expand opportunities for rehabilitation services at district and community level

It is recommended that the MOH:

10.1. Invest in innovative measures to provide basic rehabilitative care and strengthen referral pathways for cases needing more advanced care.

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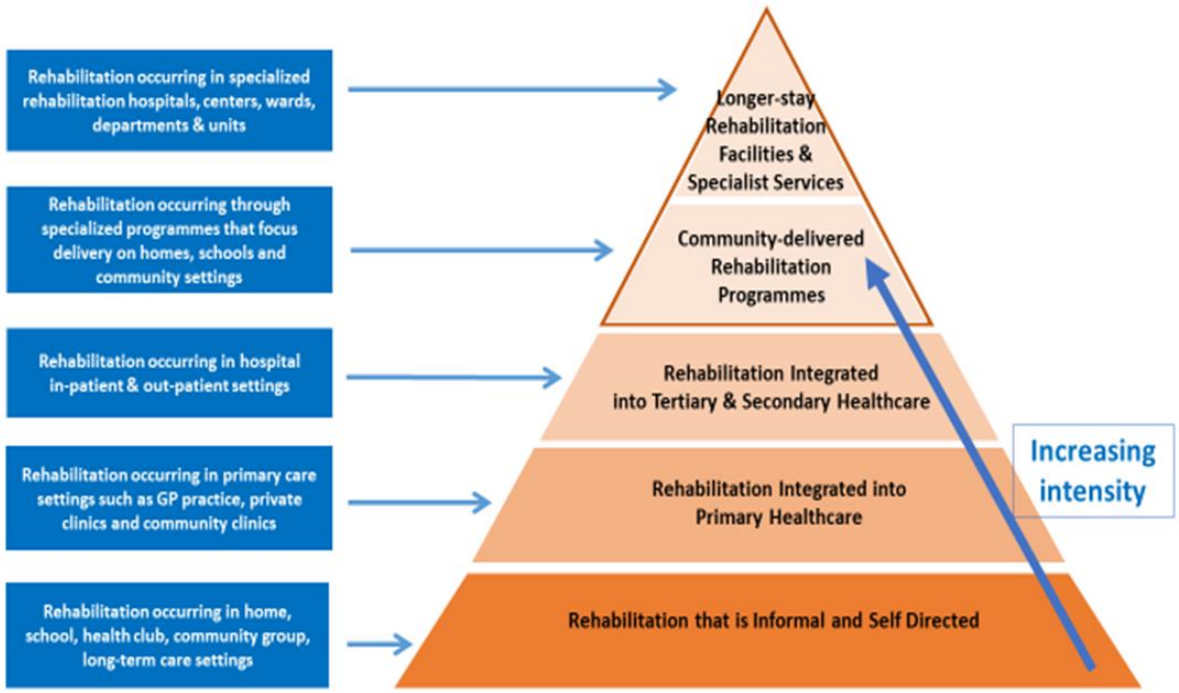
APPENDIX A – Overview of Rehabilitation

Rehabilitation is a health strategy alongside other health strategies, including promotion, prevention, curative, and palliative care. It is a fundamental part of health services and integral to the realization of Universal Health Coverage[55]. Rehabilitation covers multiple areas of health and functioning, including physical, mental health, vision, and hearing. 'Rehabilitation interventions'[56] primarily focus on improving the functioning of an individual and reducing disability. Rehabilitation is a highly-integrated form of healthcare with the majority of rehabilitation delivered within the context of other (not rehabilitation specific) health programs, for example orthopedic, neurology, cardiac, mental health and pediatric. Rehabilitation improves peoples every day functioning and increases their inclusion and participation in society, by doing so it is an investment in human capital.



Rehabilitation should be available at all levels of healthcare, from specialist referral centers through to primary and community settings[57]. Rehabilitation interventions are delivered in health facilities as well as in the community, such as in homes, schools and workplaces. Rehabilitation is a highly person-centered form of health care, it is goal orientated (i.e. very

55 World Health Organization. Fact Sheet http://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(UHC)

56 Rehabilitation interventions are a form of health interventions. Health interventions are: a health intervention is an act performed for, with or on behalf of a person or population whose purpose is to assess, improve, maintain, promote or modify health, functioning or health conditions. Examples of these acts, in the context of rehabilitation include; manual therapy, exercise prescription, provision of assistive products, education and modification of home environment.

57 The Services Framework for Rehabilitation reflects the distribution of rehabilitation required to meet community needs.

individually tailored), time bound and an active rather than passive process. Rehabilitation is most commonly delivered through a multi-disciplinary team including therapy personnel, namely physiotherapists, occupational therapists, speech and language therapists, prosthetists and orthotists, psychologists and through specialist rehabilitation medicine doctors and nurses, it can also be delivered through appropriately trained community-based rehabilitation personnel and other health personnel. In this report, as with other WHO documents, the word rehabilitation also includes habilitation[58].

Rehabilitation is for all the population; this includes people with disabilities as defined by the United Nations Convention on the Rights of Persons with Disabilities[59] (UNCRPD), as well as many others. People with short-term health conditions also benefit from rehabilitation and it commonly contributes to the prevention of impairments associated with disability. Rehabilitation regularly optimizes surgical outcomes, decreases the length of hospital stay, prevents complications, decreases re-admissions and facilitates a return to optimal functioning. Many people with disabilities also benefit from rehabilitation, and in addition to rehabilitation many people with disabilities require other programs, such as those that support their social inclusion, their participation in education, their attainment of a livelihood or their access to justice. Programs that include people with disabilities and whose primary aims are education, training, employment or social inclusion should be delivered through non-health ministries and align to the mandate of that ministry.

58 Article 26 of the UN Convention on the Rights of Persons with Disabilities refers to both Rehabilitation and Habilitation. Habilitation refers to rehabilitation in the context of people who were born with congenital health conditions.

59 As defined by the UNCRPD, People with disabilities are 'those who have long term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis to others'. However, rehabilitation is for all the population, for example people with short-term functioning difficulties as well and for many people who do not identify as having a disability or are legally acknowledged as disabled by a governments processes.

APPENDIX B – Rehabilitation in Health Systems – A Guide for Action

World Health Organization

REHABILITATION 2030

REHABILITATION IN HEALTH SYSTEMS – A GUIDE FOR ACTION

Overview

"Rehabilitation in Health Systems – A Guide for Action" (the Guide) assists governments to **strengthen the health system to provide rehabilitation.**

This initiative is a result of the February 2017 ***"Rehab 2030: A call for Action"*** meeting in Geneva. Lao PDR sent three representatives from MOH to attend this meeting.

The Guide is a 4-step process that is estimated to take about one year to complete (each country is different). WHO has developed standard data collection tools; these were first used in 2018.

In general, the process starts when the Ministry of Health expresses interest in the process and/or requests technical support from WHO for this activity. Lao PDR MOH authorized World Education to support this process in mid-2018, but has yet to send official request to WHO country office.

As of March 2019, over 60 countries have expressed interest in the process and less than ten have been completed worldwide. In SE Asia a situation assessments has been completed in Myanmar, Sri Lanka, and Solomon Islands. Vietnam and Philippines target 2019 for STARS assessment

The assessment is based around the six building blocks for health systems strengthening. Application to rehabilitation is outlined for each building block.

The Four-Phase Process

Objective	WHO Guidance	Specific Tools	Lao PDR Status
1. Determine the situation	**Systematic Assessment of Rehabilitation Situation (STARS)**	***Rehabilitation Capacity Questionnaire (RCQ)*: 8 domains, 97 questions; MOH self-assessment** ***Rehabilitation Maturity Model (RMM)*: 7 domains, 54 questions; consultant-supported scoring**	**November 2018: 26 RCQs sent to all provinces, 8 facilities in Vientiane, MOH departments** **February 2019: 10 RCQs completed.** **March 4-15: Consultant in Lao PDR for RMM process.**

2. Develop a rehabilitation strategic plan.	**Guidance for Rehabilitation Strategic Planning (GRASP)**	**Results from STARS contribute to development of strategic plan.** **Ideal to have this process supported by a Rehabilitation Working Group.**	***-Lao PDR National Rehabilitation (Medicine) Strategy 2018-2025* approved by MOH Oct 2018.** **-Rehabilitation Committee approved in October 2018; not yet activated.**
3. Establish a rehabilitation monitoring framework, and evaluation and review process	**Framework for Rehabilitation Monitoring and Evaluation (FRAME)**	**FRAME guidance assists in establishing a monitoring framework including the selection of indicators. The *Rehabilitation Indicator Menu,* a tool within FRAME includes a set of core and expanded indicators.**	**-Draft action plan developed for the 2018-2025 strategy; no formal MOH approval.** **- CMR in process of developing rehabilitation indicators for Lao PDR (March 2019).**
4. Implement the strategic plan	**Action on Rehabilitation (ACTOR)**	**The ACTOR guidance recommends rehabilitation stakeholders enter a cyclical process of joint planning, action and evaluation to operationalize the plan, and this may occur annually or biennially**	**Consider mid-term review of existing 2018-2025 strategic plan as opportunity to review and update information?**

The WHO health system building blocks are an important framework reflected within the Guide. Across the six building blocks are components that reflect rehabilitation. Table 2 illustrates the health system building blocks and corresponding rehabilitation components. The assessment and measurement of these rehabilitation components is a subject of the tools in the Guide.

Health system building blocks and rehabilitation

The Six Building Blocks of the Health System	Components Reflecting Rehabilitation
1. Leadership and governance	• Laws, policies, plans and strategies that address rehabilitation. • Governance structures, regulatory mechanisms and accountability processes that address rehabilitation. • Planning, collaboration and coordination processes for rehabilitation.
2. Financing	• Health expenditure for rehabilitation. • Health financing and payment structures inclusive of rehabilitation.
3. Health workforce	• Health workforce that delivers rehabilitation interventions - primarily rehabilitation medicine, rehabilitation allied health / therapy personnel and rehabilitation nursing.
4. Service delivery	• Health services that deliver rehabilitation interventions, including rehabilitation delivered in rehabilitation wards, units and centers, in hospital settings and rehabilitation delivered in primary care facilities and other community settings. The availability and quality of rehabilitation are considered.
5. Medicines and technology	• Medicines and technology commonly utilized by people accessing rehabilitation, primarily assistive products.
6. Health information systems	• Data relevant and inclusive of rehabilitation in the health information systems. For example, population functioning data, rehabilitation availability and utilization data, rehabilitation outcomes data.

APPENDIX C - WHO Rehabilitation Assessment Components

Note: Original Rehabilitation Maturity Model has 54 components and used in Lao PDR assessment. Updated Rehabilitation Maturity Model has 57 components; the changes are highlighted below.

GOVERNANCE	
1.	Rehabilitation legislation, policies and plans
2.	Coordination for rehabilitation
3.	Planning for the development of rehabilitation service delivery
4.	Capacity and levers for rehabilitation policy and plan implementation
5.	Accountability and reporting for rehabilitation
6.	Transparency for rehabilitation
7.	Leadership, collaboration and coalition building for rehabilitation
8.	Regulation of rehabilitation and assistive technology
Governance and procurement systems for Assistive Technology	
9.	Assistive Technology legislation, policies and plans
10.	Assistive technology procurement processes
FINANCING	
11.	Financing for rehabilitation covers all the population
12.	Financing for rehabilitation covers an appropriate range of prioritized services/interventions
13.	Financing for rehabilitation prevents financial hardship
HUMAN RESOURCES	
14.	There is adequate rehabilitation workforce available, it is sustainable and aligned to the market needs
15.	The workforce is trained with appropriate skills to match tasks and meet need
16.	The rehabilitation workforce is well managed and planned
17.	The rehabilitation workforce is motivated and supported
INFORMATION	
18.	Information is generated about rehabilitation needs, including population functioning and disability
19.	Information is generated about the availability and utilization of rehabilitation services
20.	Information is generated about outcomes, quality and efficiency of rehabilitation services
21.	Information is used to inform policy and programme decision making
SERVICES AVAILABLE	
Availability of rehabilitation across hospitals	
22.	Rehabilitation is available across tertiary levels of health care
23.	Rehabilitation is available across secondary levels of health care
Availability of rehabilitation in primary and community care	
24.	Rehabilitation is available in primary healthcare
25.	Rehabilitation is delivered in community settings
Availability of rehabilitation across all phases of care	
26.	Rehabilitation is available across the acute phases of care
27.	Rehabilitation is available across the sub-acute phases of care

28.	Rehabilitation is available across long-term phase of care
Availability of assistive products	
29.	Assistive Products range are available
30.	Assistive Product follow-up and maintenance is available
31.	Rehabilitation is available for adults with complex rehabilitation needs.
Availability of rehabilitation for children with developmental delays and disabilities	
32.	There is early identification and referral to rehabilitation
33.	Rehabilitation is available in hospital and clinical settings
34.	Rehabilitation is available in community settings during early childhood
35.	Rehabilitation is available in community settings during school age
36.	Rehabilitation is available for target populations in need
37.	Rehabilitation infrastructure, equipment and medicines are available (moved from workforce)
SERVICES QUALITY	
Rehabilitation is effective	
38.	It utilizes evidence-based interventions
39.	It utilizes effective and efficient dosages of rehabilitation interventions
40.	Rehabilitation is effective, it is timely and delivered along a continuum of care (previous stand-alone)
41.	Rehabilitation is person-centered, it empowers and engages users, family, carers
42.	Rehabilitation is convenient, and socially and culturally acceptable
43.	Rehabilitation is safe
OUTCOMES AND ATTRIBUTES OF REHABILITATION	
Access and coverage of rehabilitation	
44.	Rehabilitation is available to all who need it
45.	Rehabilitation is affordable to all who need it
46.	Rehabilitation is acceptable to all who need it
Equity of rehabilitation	
47.	Rehabilitation is equitable across levels of functioning in the population (47 & 48 joined in original)
48.	Rehabilitation is equitable across disadvantaged population groups (47 &48 joined in original)
Efficiency of rehabilitation	
49.	Rehabilitation has allocative efficiency
50.	Rehabilitation has technical efficiency
Accountability of rehabilitation	
51.	Governing Agencies for rehabilitation are accountable
52.	Service Providers of rehabilitation are accountable
53.	Rehabilitation Professionals are accountable (added)
Sustainability of rehabilitation	
54.	Rehabilitation has financial sustainability
55.	Rehabilitation has institutional sustainability
56.	Rehabilitation is resilient to crisis and disaster

IMPACT	
57.	Population functioning (added)

APPENDIX D – Assessment Schedule

STARS (Systematic Assessment of Rehabilitation Situation) Assessment Lao PDR (March 4-15, 2019)

Date	Activity	Participants	Location
Mon 4 March (ALL DAY)	**STARS preparation meeting: scheduling**	Dr Bouathep Phoumindr Sue Eitel, Consultant Bernard Franck (WE) Donna Koolmees WE) Lori Baxter (HI)	World Education
Tue 5 March: (AM)	**Courtesy visit with MOH official** Head of Cabinet (Dr. Naobouta)	Dr Bouathep Phoumindr Sue Eitel Bernard Franck	MOH
Tue 5 March (PM)	**Roundtable meeting of MOH officials**	10 Representatives from MOH Dr Bouathep Phoumindr Sue Eitel, Lori Baxter, Bernard Franck	MOH
Wed 6 March (ALL DAY)	**Travel to Savannakhet Province** • Directors meeting (PHO,PH,PRC) • Visit to Provincial Hospital • Visit to Rehabilitation Sub-Center • Informal meeting DHR Division chief at SVK airport	Dr. BongSouvanh (PHO) Dr. Phouvilay (Provincial Hospital) Mr. Peng Sayaphet (PRSC) Dr. Keosayfai (trained in rehab) Dr. Bouathep Phoumindr Sue Eitel, Lori Baxter (Dr. Somchan THOUNSAVATH)	Savannakhet Province
Thu 7 March (AM)	**FGD with service users**	7 users of rehab/AT services (Sue Eitel, Lori Baxter, Sichanh)	HI office
Thu 7 March (PM)	**FGD Informal Rehabilitation Actors Group** Topic: SWOT for STARS domains	WE, HI, ICRC, and CBM	World Education
Fri 8 March (AM)	**COPE informal discussion**	Dr. Bounlanh, CEO Sue Eitel	Lao Plaza
Mon 11 March (AM)	**Meeting with/ visit to CMR**	Mr. Bounpheng (DHR rep) Dr. Khamko, Deputy Director CMR 8 CMR staff Sue Eitel, Bernard Franck	CMR
Mon 11 March (PM)	**Focus Group Discussion (FGD) with rehabilitation service providers/frontline staff**	5 PTs, 2 MDs, 1 administrator Sue Eitel, Lori Baxter	World Education

Tue 12 March (AM)	**Meeting with Faculty of Medical Technology**	Dr. Naly (Vice Dean) Ms. Sivisay (Department of PT) Sue Eitel, Lori Baxter	FMT
Tue 12 March (PM)	**Meeting with/visit to Ban Koeun**	Mr. Bounpheng (DHR Rep) 8 Ban Koeun representatives Sue Eitel, Bernard Franck, Lori Baxter	Ban Koeun
Wed 13 March (ALL DAY)	**Visits to Central Hospitals** • Hadxaifong District Hospital • Mittaphab Hospital • Children's Hospital • Mahosot Hospital	Dr. Phoumsavath (DHR rep) Sue Eitel Lori Baxter	Vientiane Capital
Thu 14 March (AM)	**Meeting MOH Planning Department** **Meeting WHO Country Office**	Dr. Kamphet (Director) Sue Eitel, Bernard Franck Dr. Mark Jacobs, Representative Sue Eitel, Bernard Franck	MOH WHO
Thu 14 March (PM)	**Meeting MOH Vice Minister** **Meeting MOH Health Personnel Department**	Vice Minister Phoutone Dr. Bouathep Phoumindr Sue Eitel and Bernard Franck Mr. Khampasong (Deputy Director) Dr. Bouathep Phoumindr Sue Eitel and Bernard Franck	MOH
Fri 15 March (AM)	**Finalization of de-brief meeting document**	Sue Eitel USAID Okard Technical Team	World Education
Fri 15 March (PM)	**STARS debrief meeting with MOH** **Informal visits to local pharmacies**	Dr. Bounnack (Director DHR) Dr. Bouathep Phoumindr Sue Eitel, Lori Baxter, Donna Koolmees, and Bernard Franck Sue Eitel, Bernard Franck, Lori Baxter	MOH
Fri 26 April (all day)	**STARS preliminary findings with MOH**	Dr. Bouathep Phoumindr, DHR Dr. Chansaly, HMIS Ms. Tak Chaoulaxay, FMT Ms. Laxoy Soyvienvong, DHPE Mr. Bounpheng Phetsouvanh, DHR Dr. Khamko Chomlath, CMR Dr. Thongphet Sithivanh, CMR	MOH

		Mr. Khamvanh Lathphommachan, IT Ms. Maniphet Phimmasane, DHP Sue Eitel, Bernard Franck, Lori Baxter	

APPENDIX E – Key Contacts from the Assessment

Ministry of Health

1. Dr. Phoutone MUONGPAK, Vice Minister, m.phouthone@yahoo.com
2. Dr. Naobouta, Director of Cabinet
3. Dr. Bounnack Saysanasongkham, Director, HCR Department
4. Dr. Bouathep Phoumindr, Deputy Director General, HCR Department
5. Dr. Somchan Thounsavath, Director of HCR Division, jectHCD@yahoo.com
6. Mr. Bounpheng Phetsouvanh, Staff; HCR Division
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Center for Medical Rehabilitation

1. Dr. Khamko Chomlath, Deputy Director CMR, chomlako@yahoo.com
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8. Dr. Singkham Phoumiphak, Head of Research, singkhampmp@gmail.com
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2.Dr. Phouvilay KEOMOUNGKHOUN, Director Provincial Hospital, phouvilay_kmk@hotmail.com
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Children's Hospital

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3. Dr. Sonenaly Khantharod, Head of Department, Traditional Medicine Tel:02055695174

4. Mr. Phouvong, Deputy Department, Head of PT Section, PP.Phouvong@gmail.com

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Ban Koeun Rehabilitation Center
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APPENDIX F – Preliminary Findings – Debriefing Document

SITUATION ASSESSMENT OF REHABILITATION SITUATION (STARS) IN LAO PDR – PRELIMINARY FINDINGS

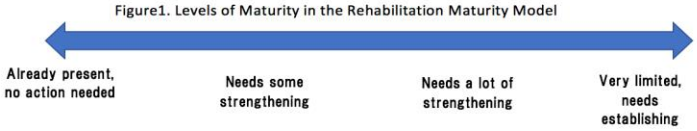
The WHO STARS tool is one of four components to the WHO Rehabilitation in Health Systems - Guide for Action (referred to as The Rehabilitation Guide).

The WHO Rehabilitation Guide includes guidance for a four-phase process of; rehabilitation situation assessment, rehabilitation strategic planning, establishing a monitoring framework and evaluation and review processes for the strategic plan, and implementation of the strategic plan.

The STARS tool includes guidance for assessing rehabilitation against 52 components that exist within a mature health system that delivers comprehensive rehabilitation. The 52 components have been identified based on their importance for achieving effective, high-performing rehabilitation across a country.

The WHO STARS tool describes each of the 52 components across four levels of maturity, as illustrated in figure 1, this is referred to as the Rehabilitation Maturity Model. Each of the 52 components is considered during the assessment process within a country and a grading along the level of maturity is given. The grading is undertaken as much as possible in discussion with the government however mostly it is the consultant utilizing the tool that completes the process.

Figure1. Levels of Maturity in the Rehabilitation Maturity Model

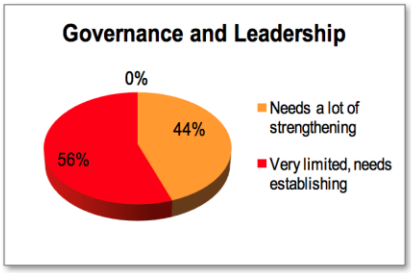


The 52 components are grouped under seven domains which form the overall structure to this report, they are listed below.

1. Governance and Leadership
2. Health Information Systems
3. Financing
4. Human Resources and Infrastructure
5. Service Accessibility
6. Service Quality
7. Attributes and Outcomes

The purpose of the grading exercise utilizing the Rehabilitation Maturity Model is to provide an overview to the performance of different rehabilitation components. This overview enables comparison across components and domains that can then assist in the identification of priorities and recommendations. Within a country it is anticipated that the results can be compared over time to inform progress.

Note: The Rehabilitation Maturity Model (RMM) is a standard tool developed by WHO to collect data on 7 domains each with sub-components. Each page addresses one domain. The preliminary visual is provided in a pie chart and sub-components used in the WHO tool are italicized.



GOVERNANCE AND LEADERSHIP- WHO COMPONENTS

1. *Rehabilitation has legislation, policies and plans.*
2. *There is leadership, collaboration and coalition building*
3. *There is planning to expand the delivery of rehabilitation*
4. *There is accountability and reporting for rehabilitation*
5. *There is transparency for rehabilitation*
6. *Rehabilitation is regulated*
7. *Assistive Technology has adequate governance and processes*

KEY ACHIEVEMENTS / STRENGTHS

1. Department of Healthcare and Rehabilitation established
2. National Rehabilitation Medicine Strategy 2018-2025 endorsed by MoH
3. National Rehabilitation Committee articulated
4. Department of Health Personnel engaged in rehab planning.
5. WHO and INGOs are positioned to offer support

CHALLENGES

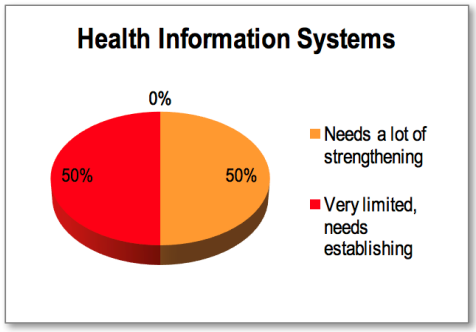
1. MoH rehabilitation staffing structure is unclear, no documentation on roles and responsibilities
2. Strategy not yet launched; copies of printed strategy not yet circulated
3. Under-developed structure of National Rehab Committee (composition, terms of reference, etc)
4. No evidence of regulatory structures for rehabilitation workforce or assistive products
5. MoH has yet to formally request rehabilitation-related support from WHO

IMPRESSIONS

There are a number of individual champions who are passionate about rehabilitation and invested in promoting the sector. These individuals hold different positions within the MoH. Each are advocating for advances in the rehabilitation sector. Without a clear governance structure and cohesive leadership, there may be missed opportunities for streamlining efforts.

PRIORITY ACTION

Clarify and activate the National Rehabilitation Committee who, in turn, may address strategic planning, monitoring & evaluation, and other governance and leadership issues.



HEALTH INFORMATION SYSTEMS – WHO COMPONENTS

Information is generated about:

1. *Rehabilitation needs and the disability, functioning of the population*
2. *The availability and utilization of rehabilitation services*
3. *Outcomes, quality and efficiency of rehabilitation services*

4. *Information is used to inform policy and program decision making*

KEY ACHIEVEMENTS / STRENGTHS

1. 2015 census included Washington Group questions
2. Government commitment to DHIS2
3. Information is available on service availability

CHALLENGES

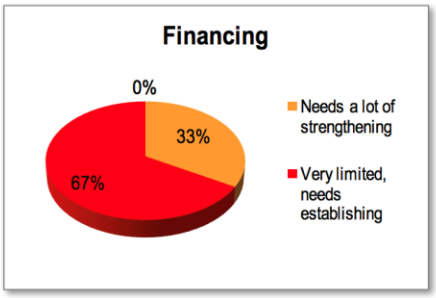
1. No evidence of research or data collected about rehabilitation service outcomes
2. No evidence of standardized methods of content of service record data
3. Information/data does not appear to drive policy and program decision-making

IMPRESSIONS

DHIS2 offers excellent opportunities to build out rehabilitation information. Service-level data has very little depth and appears focused primarily on treatment modalities (electrotherapeutic, thermal, light, ultrasound).

PRIORITY ACTION

Clarify and activate the National Rehabilitation Committee who, in turn, may review challenges related to rehabilitation-related data collection and use.



FINANCING – WHO COMPONENTS

1. *The extent of financing for rehabilitation and assistive products*
2. *The affordability and financial protection of rehabilitation and assistive devices*

KEY ACHIEVEMENTS / STRENGTHS

1. Evidence of MoH budget support for rehabilitation
2. Evidence that health insurance* covers physical therapy treatments
3. Some assistive products are provided free of charge
4. Lao PDR is working toward UHC by 2025
5. MoH and MoLSW both contribute to assistive products

* Distinction between private and national health insurance not made.

CHALLENGES

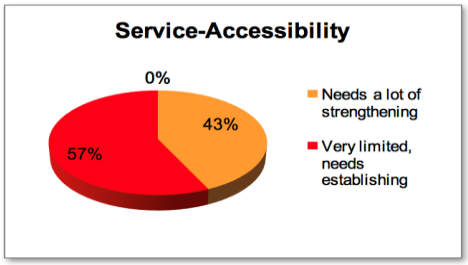
1. Limited or no budget provided by MoH for assistive products.
2. Provincial health budget for rehabilitation competes with other health priorities
3. Health insurance is linked to a specific hospital and not accepted by CMR or Sub-Centers
4. Rehabilitation techniques and products are not articulated in essential health service package
5. Limited evidence of collaboration between MoH and MoLSW related to rehab and AP

IMPRESSIONS

There are positive trends in health insurance coverage and budget allocations for rehabilitation, but much more can be done. Coordination with MoLSW is needed to avoid duplication and ensure effective use of resources.

PRIORITY ACTION

Clarify and activate the National Rehabilitation Committee who, in turn, may advocate for the development of rehabilitation services packages and budget allocation from MoH.



SERVICE-ACESSIBILITY – WHO COMPONENTS

Rehabilitation is available:

1. *Across hospitals*
2. *In the community*
3. *Across all phases of care*
4. *For adults with complex needs*
5. *For children*
6. *For specific groups (mental health, vision/hearing, elderly etc)*
7. *Assistive Products (AP) are available*

KEY ACHIEVEMENTS / STRENGTHS

1. PT is available in acute and sub-acute settings
2. PT at all Central Level hospitals and 16 Provincial Hospitals
3. Community based rehabilitation in some districts of some provinces
4. CMR services include a pediatric unit, some AP, and long-term care
5. Private pharmacies carry a range of assistive products
6. Children's Hospital Child Development Clinic operational since 2015
7. Mobile clinic services (P&O focus) in less than 50%of provinces
8. Evidence of PT services offered in private clinics/homes.

CHALLENGES

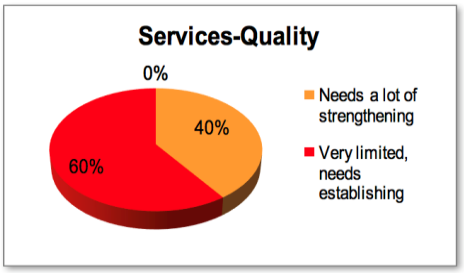
1. Type of personnel providing rehabilitation is limited (no OT, SALT specialists)
2. Limited evidence of coordination and referral between levels and settings
3. Rehabilitation delivered at community level is only one small part of CBR program
4. Evidence of AP in hospitals for in-patient use and some offer crutches in pharmacy
5. Limited type and number of AP available through government providers
6. No evidence of rehabilitation for children in school years.
7. Limited availability of rehabilitation for people with complex needs
8. Extremely limited rehabilitation services for hearing, vision and mental health needs

IMPRESSIONS

Although PT is available across multiple levels and settings, PT/rehabilitation departments seem underutilized due to lack of demand.

PRIORITY ACTION

Clarify and activate the National Rehabilitation Committee who, in turn, may investigate barriers that limit demand for rehabilitation services.



SERVICES-QUALITY – WHO COMPONENTS

Rehabilitation is:

1. *Effective*
2. *Timely and delivered along a continuum of care*
3. *Person-centered, it engages and empowers users, family & carers*
4. *Convenient, it is socially and culturally appropriate*
5. *Safe*

KEY ACHIEVEMENTS / STRENGTHS

1. User satisfaction solicited at CMR and sub-centers
2. Service standards for lower limb prosthetics (CMR)
3. Quality control measures for AP from CMR and Sub-centers
4. There is evidence of training families and carers for home program
5. Regional technical resources for rehabilitation (language, proximity)

CHALLENGES

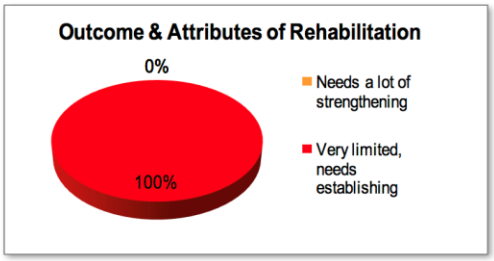
1. Little or no evidence of evidence-based treatment choices or dosing
2. No evidence of national clinical practice guidelines for PT services
3. Very little clinical rehabilitation research; mostly linked to pre-service training
4. Absence of regulatory mechanisms, licensing and credentialing
5. CPD not required and this may create imbalance in treatment within PT departments
6. Little or no specialization within rehabilitation workforce

IMPRESSIONS

There appears to be limited attention toward the quality of physical therapy services. Treatments seem to follow commonly accepted practices that include extensive use of modalities (electrotherapeutic, thermal, light, ultrasound) and limited utilization of manual therapies and exercise. Evidence-based care is severely under-developed.

PRIORITY ACTION

Clarify and activate the National Rehabilitation Committee who in turn, may address outcomes based care and other measures related to rehabilitation service quality.



OUTCOMES AND ATTRIBUTES OF REHABILITATION – WHO COMPONENTS

1. *Rehabilitation is accessible leading to good coverage of rehabilitation interventions*
2. *Rehabilitation is equitable across levels of functioning and between population groups*
3. *Rehabilitation is efficient*
4. *Rehabilitation is accountable and sustainable*

KEY ACHIEVEMENTS / STRENGTHS

1. Rehabilitation is commonly delivered in major cities and large hospitals
2. Evidence of some initiatives to reduce out of pocket costs for rehabilitation

CHALLENGES

1. Distribution of services and personnel do not reach community levels.
2. Little or no information available to drive demand for quota positions or services
3. Case coordination and management is inadequate and little outcome measurement.
4. No evidence-based models of care that support efficient delivery of rehabilitation.
5. The value of rehabilitation healthcare has not been well established.
6. Governance structures for rehabilitation are not clear.
7. Limited accountability from service providers on quality, effectiveness and efficiency.

IMPRESSIONS

Though there are many positive rehabilitation-related trends across all building blocks of health systems strengthening, rehabilitation in Lao PDR is at a foundational level and could benefit from extensive investment.

PRIORITY ACTION

Clarify and activate the National Rehabilitation Committee who, in turn, may address challenges reflected across all building blocks of health systems strengthening

APPENDIX G – Comparing Guidance Documents on Rehabilitation

No.	**Rehab 2030: A Call for Action** (10 Areas for Action)	**Western Pacific Regional Framework on Rehab** (4 Priority Action Areas)	**STARS Rehabilitation Maturity Model** (7 Domains)	**Lao PDR National Rehabilitation Strategy** (6 Strategic Objectives)
1.	Strong leadership	Rehabilitation service availability and quality	Governance and leadership	Update governance, policies and information on rehabilitation
2.	Strengthen rehabilitation planning and implementation	Rehabilitation governance and financing	Health information systems	Increase financing for rehabilitation
3.	Integrate rehabilitation into the health sector	Rehabilitation workforce	Financing	Broaden integration of rehabilitation into health sector
4.	Incorporate rehabilitation into UHC	Rehabilitation data and research	Human resources and infrastructure	Develop capable multidisciplinary workforce
5.	Build service delivery models		Service availability	Strengthen and expand the habilitation and rehabilitation services network
6.	Develop multidisciplinary workforce		Service quality	Collect rehabilitation data and support research
7.	Expand financing for rehabilitation		Attributes & outcomes of rehabilitation	
8.	Collect information relevant to rehabilitation (ICF)			
9.	Build research capacity and evidence for rehabilitation			
10.	Networks/partnerships in rehabilitation.			

In summary, all guidance documents address rehabilitation through five of the six building blocks for health systems strengthening:

- Governance (yellow)
- Finance (green)
- Workforce (orange)
- Service delivery (blue)
- Information/research(purple)

The sixth building block (medical products/assistive technology) is reflected as part of service delivery and/or across multiple areas (e.g. governance, financing).