

CDMAT CORE GROUP MEETING WITH NPH_MINUTES

Date: 06 Dec 2019 Time: 0900 Location: AHC, Siem Reap Cambodia

Attendees

Name	Affiliation	Title	Status
Lina Saem Stoeys	AHC	cDMAT Core Group, member	Present (minutes taker)
Pheaktra Ngoun	AHC	cDMAT Core Group, member	Present
Piet de Mey	Consultant	cDMAT Core Group, member	Present
Rachana Khoeun Khann	AHC	cDMAT Core Group, member	Absent
Klaus Baesel	GIZ	cDMAT Core Group, member	Absent
Jessica Whitney	Safe Haven	Country Director	Present
Kathy Clark	Safe Haven	PT	Present
Heather Connell	Safe Haven	Founder	Present
Nott Chan	Safe Haven	Interventionist	Present
Rany Mean	Safe Haven	Interventionist	Present
Rany Khut	AHC	PT	Present
Sothy Tan	AHC	PT	Present

Introduction

Lina began meeting with presentation and agenda (attached). Attached slides were handed out to all attendees. Everyone introduced himself or herself. Lina and Pheaktra gave a brief intro to the cDMAT Core Group, and Heather introduced Safe Haven.

cDMAT Core Group

Lina presented the current members of the cDMAT Core Group. Dr Rachana and Klaus' absence were noted at Dr Rachana was on maternity leave, and Klaus has moved to continue working for GIZ in Germany. Lina noted that Virak Seng would soon be added as a member of the Core Group as the cDMAT website designer. Lina formally invited Safe Haven to join the cDMAT Core Group. Jessica accepted the invitation and announced that she and a senior interventionist named Sopheary Luy would be joining the group. Pheaktra formally asked, at which they agreed, AHC PTs Rany and Sothy to also join the group.

Lina stated that there is room for more members. Jessica suggested a couple of names, one of whom was Caitlyn McElroy of USAID. Post-meeting: Jessica introduced the group to Caitlyn via email. Lina extended the invitation to Caitlyn. Both Lina and Caitlyn will hold a telephone conference on 17th or 18th Dec.

cDMAT project

Lina explained the aim of the cDMAT project and briefly described the evolution of the cDMAT. She pronounced the newly published article and encouraged all attendees to share the publication. Lina briefly talked about the cDMAT and bar graphs, 2019 versions. A long discussion was allowed on the CB-DMAT as one of the goals for 2020 is to promote the tool.

www.cDMAT.org

Lina demonstrated the cDMAT website and encouraged all attendees to have a browse and to refer others with questions or interest in the cDMAT to visit the website. She stressed that all final versions of the tools and any other documentation on the cDMAT could be found on the website.

Action: Lina to update the website with the new members and other documents and inform all members when updated

cDMAT recognition

Lina presented a slide showing organizations and institutions whom the Core Group has had direct contact and presented the cDMAT. These organizations included the MOH, NPH, WB and now Safe Haven.

cDMAT contracts and translations status

Pheaktra provided updates on the translation of the cDMAT. The first draft version is pending Safe Haven's reviews, and Jessica hopes to their input by next month. Piet discussed his work on the family stimulation guide. When these documents have been translated, translating the bar graph and the CB-DMAT will not require much work. Lina, Kathy, Jessica and others agree that filming the children's performance for training purposes is a good idea and would be very useful for parents and health professionals. Piet provided updates on his work on the Android application.

Jessica provided updates on the contract for the translation services. The decision on the grant contract for the translation of the cDMAT (ca. 3000 USD) from Safe Haven is expected in this or next month. Post-meeting: Jessica informs the team that the grant for 3500 USD has been rewarded for completing the translation of the cDMAT that was already in progress.

The grant for other translations, video training, and others are pending decision, which Jessica will inform us as soon as she hears from Safe Haven. Jessica mentioned there some of the cDMAT activities planned for 2020 (such as the video making) could be coupled with the grant for capacity building.

Piet made aware that there will be a call for grant proposal put out by USAID in mid-December 2019.

cDMAT activities in 2020

Lina described several activities for 2020, which are listed on slide 13 in the presentation. It was stressed that the eager to get an 'acceptance' from the MOH is still the top priority. Lina and Pheaktra will work on this during the new year.

Next Meeting

End-May 2020 (unconfirmed)

cDMAT



សេដ្ឋកិច្ច



Safe Haven



cDMAT Core Group Meeting with Safe Haven

December 6, 2019
Siem Reap, Cambodia



cDMAT Core Group Meeting with Safe Haven

Part 1: Lina

0900 – 0905 Introduction to cDMAT Core Group and Safe Haven

0905 – 0920 cDMAT: history, projects, tool and website

Part 2: Pheaktra and Jessica

0920 – 0925 cDMAT translation – status

Part 3: Piet and Jessica

0930 – 0940 Family stimulation guide & PT manual translation, other translation, training video, android application

Part 4: Lina

0940 – 0950 cDMAT activities for 2020

0950 – 1000 New members to cDMAT Core Group



cDMAT Core Group



Dr Chanpheaktra Ngoun

- Founder of cDMAT
- AHC

Dr Piet de Mey

- Health and disability specialist
- Consultant

Lina Saem Stoej

- Master of Public Health
- Volunteer at AHC

Dr Rachana Khoeun Khan

- Paediatric neurologist
- AHC

Klaus Baesel

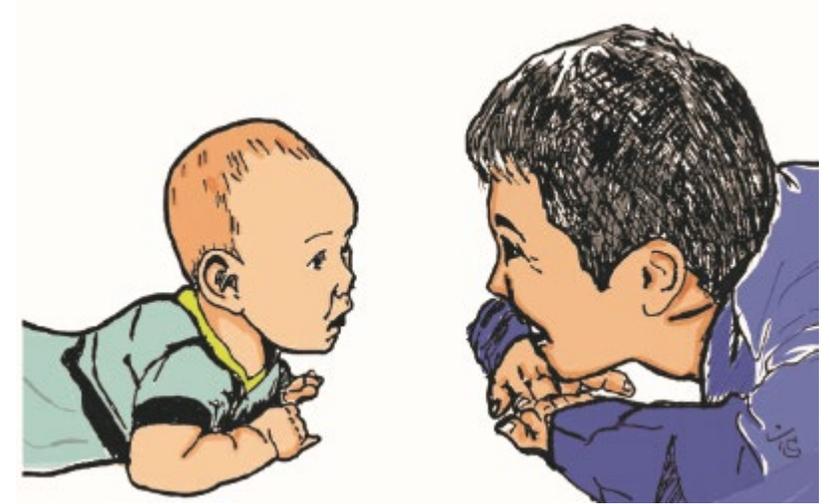
- Junior Advisor
- GIZ

Virak Seng

- cDMAT.org
- Website designer

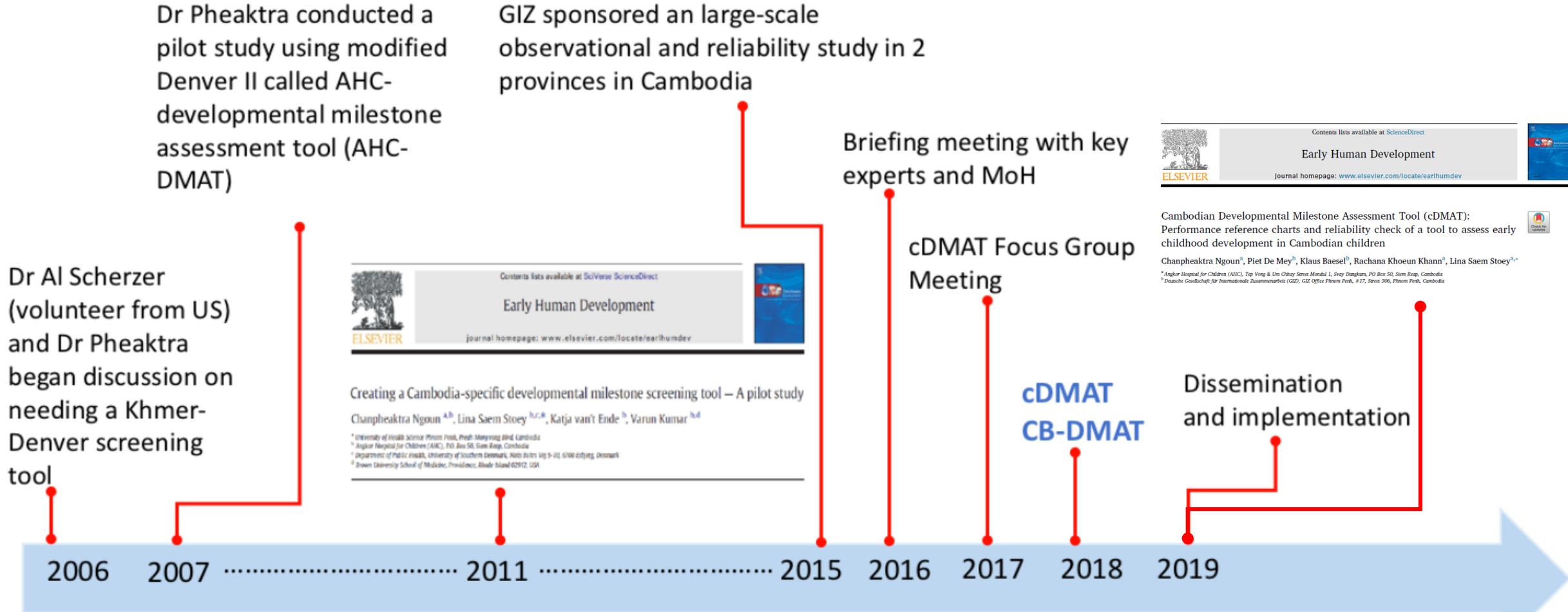
What is the cDMAT project?

The **C**ambodian **D**evelopmental **M**ilestone **A**ssessment **T**ool (cDMAT) project aims to develop a culturally-sensitive and environmentally appropriate tool that assesses the developmental milestones of Cambodian children.





cDMAT timeline



Cambodian Developmental Milestone Assessment Tool (cDMAT): Performance reference charts and reliability check of a tool to assess early childhood development in Cambodian children

Chanhpeaktra Ngoun^a, Piet De Mey^b, Klaus Baesel^b, Rachana Khoeun Khann^b, Lina Saem Stoeys^{a,c}

^a Angkor Hospital for Children (AHC), Tep Vong & Um Chhay Street Mondul 1, Srae Dangkm, PO Box 50, Srae Rang, Cambodia
^b Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), GIZ Office Phnom Penh, P-17, Street 306, Phnom Penh, Cambodia

cDMAT 2019



Cambodian Development Milestone Assessment tool (cDMAT)

Name: _____ Child enrolled in (pre-)school? ___ No ___ Yes ___ Unknown

Birthdate: ___/___/___ Highest educational level of the principal caretaker:
 ___None ___Primary ___Secondary ___Academic

Gender: ___Female ___Male

Assessment date: ___/___/___ Age at time of assessment: ___ month(s)

Features:

- 4 domains
- 129 items
- 99%pass
- 2-page tool
- Instruction
- 10-30 mins.
- Trained professional

99+ m	Social/personal	Pass	Fail	NA
2	Look at face (start 0 m)			
5	Brief interest in toy			
5	Cry when appropriate (start 6 m)			
6	Smile responsively			
6	Smile spontaneously			
6	Observe object in each hand			
7	Recognize its own hands (start 9 m)			
7	Explore environment (start 12 m)			
8	React to play			
9	Seek object fallen on floor			
12	Recognize stranger (start 18 m)			
13	Anxiety to separate			
14	Play 'chab chaab'			
17	Indicate wants			
17	Hold and drink from cup			
18	Greet with hand clasp (start 24 m)			
19	Play 'woh ... vak-eu'			
22	Imitate activities (start 30 m)			
26	Use spoon			
27	Ask to use toilet (start 36 m)			
30	Point to 2 body parts			
32	Comb hair with help			
34	Put on simple clothes with help			
40	Wash and dry hand			
41	Parallel play w/out sharing (start 48 m)			
43	Play well with others (sharing)			
45	Tell own name and gender			
45	Name a friend			
51	Put on T-shirt without help			
51	Serve own food			
52	Dress without help ((un)button)			
62	Comb hair without help			
64	Play kid games, wait turns (start 60 m)			

99+ m	Fine motor	Pass	Fail	NA
6	Follow object to midline s90d (start 0 m)			
6	Follow object passed midline (>90°)			
6	Grasp big object (start 9 m)			
7	Play with own body			
7	Hands together			
8	Follow object 180 degrees (start 12 m)			
8	Looks at small objects			
10	Reach for red string			
10	Rake lotus seed (1/3) (start 18 m)			
13	Put object in mouth			
14	Take objects in each hand			
17	Transfer object btw hands (start 24 m)			
21	Thumb-finger grasp			
21	Put block in cup (start 30 m)			
23	Bang 2 objects together			
29	Pincer grasp			
29	Tower 2 blocks			
31	Scribble with pencil			
33	Tower 4 blocks			
36	Tower 6 blocks			
36	Lift lid of container (start 36 m)			
41	Unscrew a jar (start 48 m)			
41	Make string with ≥3 beads			
42	Take off easy clothes (start 60 m)			
42	Wiggle one thumb			
48	Imitate vertical line (<30°)			
51	Fold a paper			
61	Zip and unzip			
67	Catch soft ball			
70	Copy circle			
70	Tie single knot			
73	Copy square			

99+ m	Language/cognition	Pass	Fail	NA
5	Respond to noise (start 0 m)			
5	Turn head to sounds (start 9 m)			
6	Make sounds			
6	Laugh aloud (start 12 m)			
7	Squeal			
8	Turn head to voice (start 18 m)			
12	Babble			
16	Respond to his name			
16	Ma or pa (start non-specific)			
19	Say play sound (start 24 m)			
21	One-step command			
23	Mak/paa/bong (specific) (start 30 m)			
24	Say ≥1 word beside mak/paa			
30	Two step-command (start 36 m)			
31	Say words (≥3)			
35	Say words (≥6)			
36	Point to pictures of objects (≥2/5)			
39	Speak half understandably			
39	Name animals (≥1/5)			
39	Say a 3-word phrase			
39	Point to object photos (≥4/5) (start 48 m)			
42	Three-step command			
44	Name animals (≥4/5)			
47	Know use/action of objects (1/3)			
50	Pick the longest line (3/3)			
51	Know use/action of objects (2/3) (start 60 m)			
52	Speak understandably			
55	Use pronouns correctly			
56	Know use/action of objects (3/3)			
61	Know 4 animal sounds			
62	Conversation			
63	Count 1 to 5			
69	Name 1/6 colors			

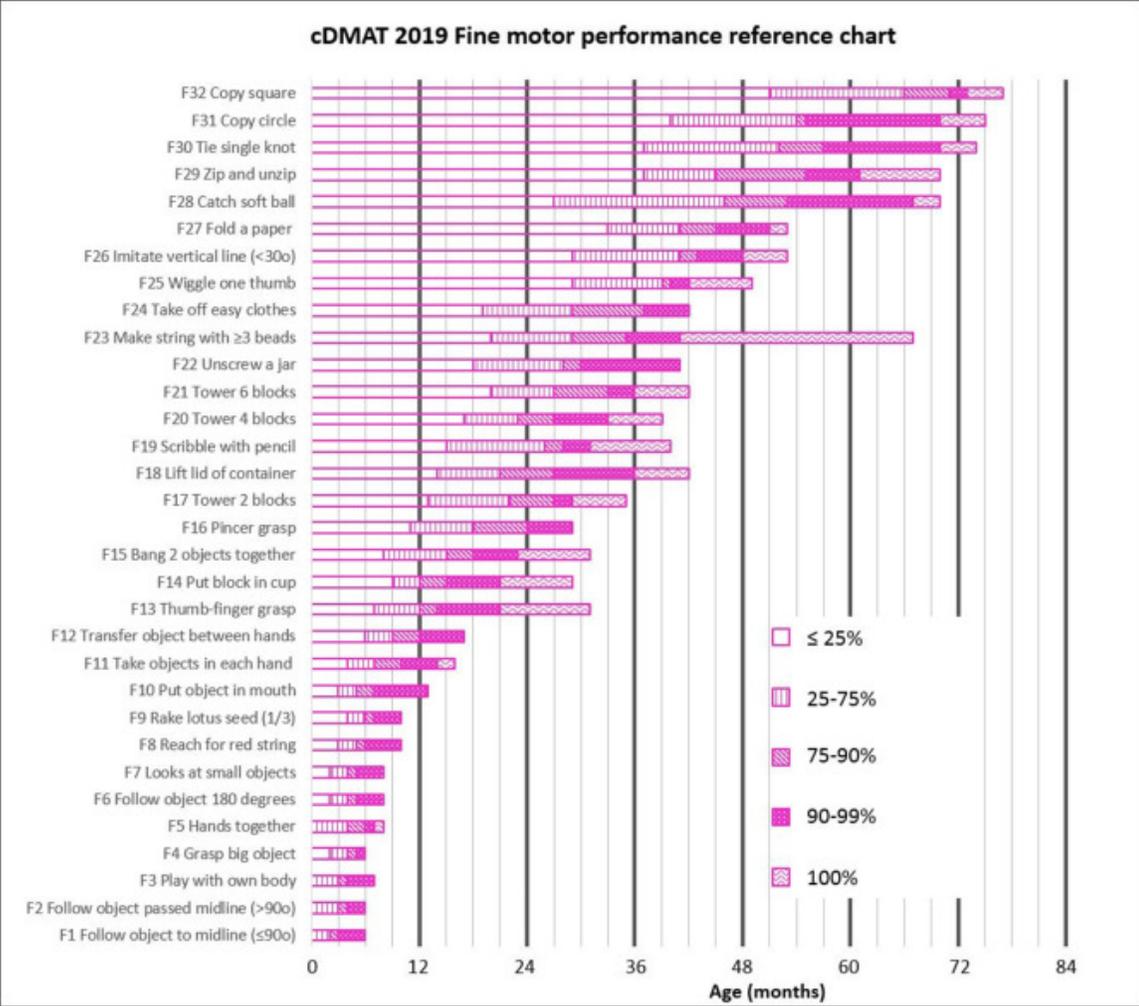
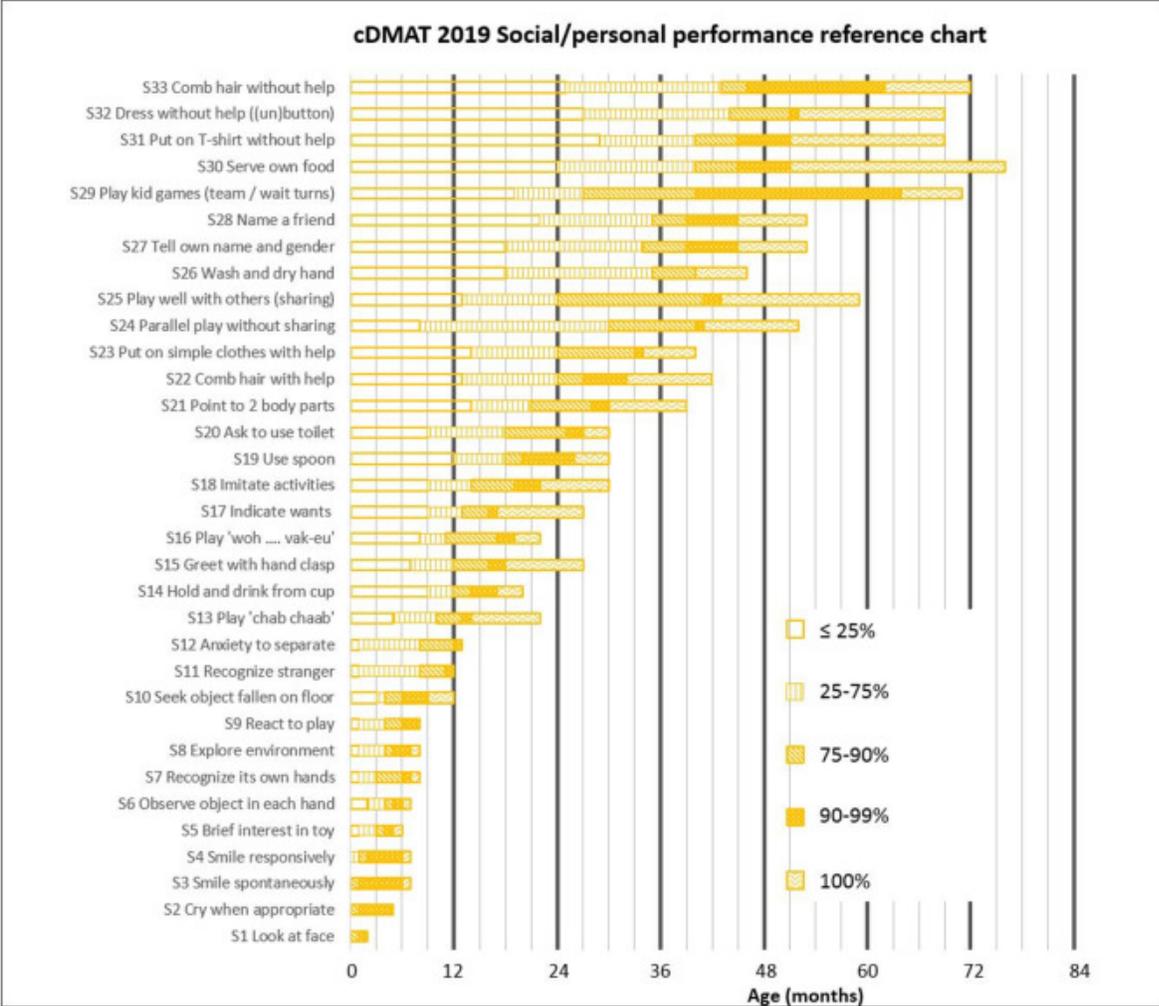
99+ m	Gross motor	Pass	Fail	NA
3	Equal movement (start 0 m)			
5	Lift head (start 6 m)			
5	Turn head aside laying face down			
5	Head up 45 degrees			
6	Sit up steadily (≥2 sec)			
7	Bear weight on legs (≥2 sec) (start 9 m)			
8	No head lag when pulled to sit			
8	Roll over (start front to back)			
8	Chest up with arm support			
10	Standing holding on (≥10 sec) (start 12 m)			
10	Crawl (≥3 moves)			
11	Sit without support (≥10 sec)			
11	Pull up to stand (≥2 sec)			
13	Turn head and trunk in all direction			
13	Getting to sit			
14	Stand alone (≥2 sec) (start 18 m)			
17	Take steps w/ holding (≥5 steps) (start 24 m)			
17	Stand alone (≥10 sec)			
17	Walk alone (≥5 steps) (start 30 m)			
24	Stoop and recover (start 36 m)			
24	Walk up (≥2 steps)			
25	Run with good balance (≥2 m)			
33	Walk backward (≥2 steps) (start 48 m)			
39	Jump up with both feet together			
40	Kick ball forward (start 60 m)			
48	Throw object overhand			
51	Balance on each foot (≥1 sec)			
61	Jump far (>20 cm)			
62	Hop on one foot (≥2 times)			
64	Balance on each foot (≥3 sec)			
65	Straight heel-to-toe walk (≥4 steps)			

Comments / specific observations during the assessment

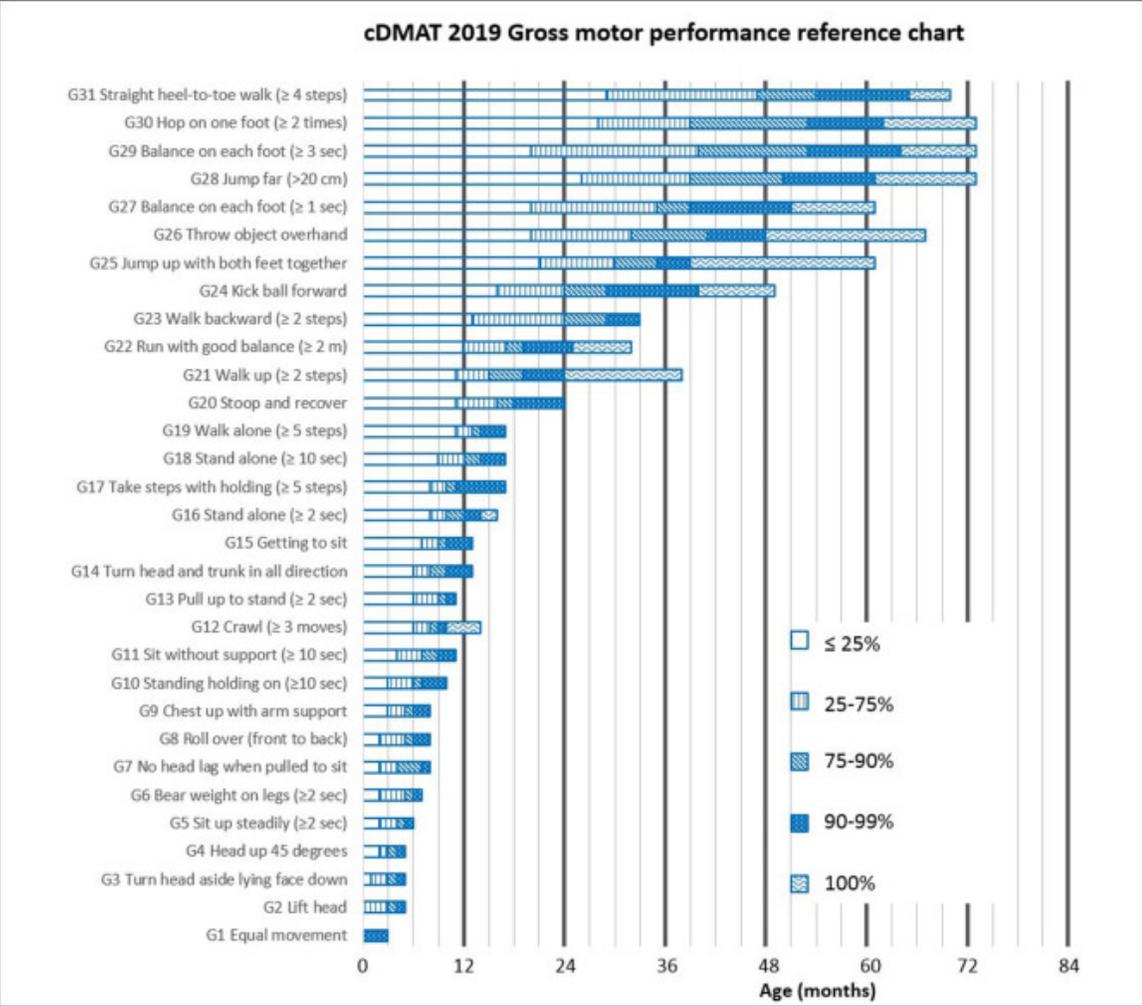
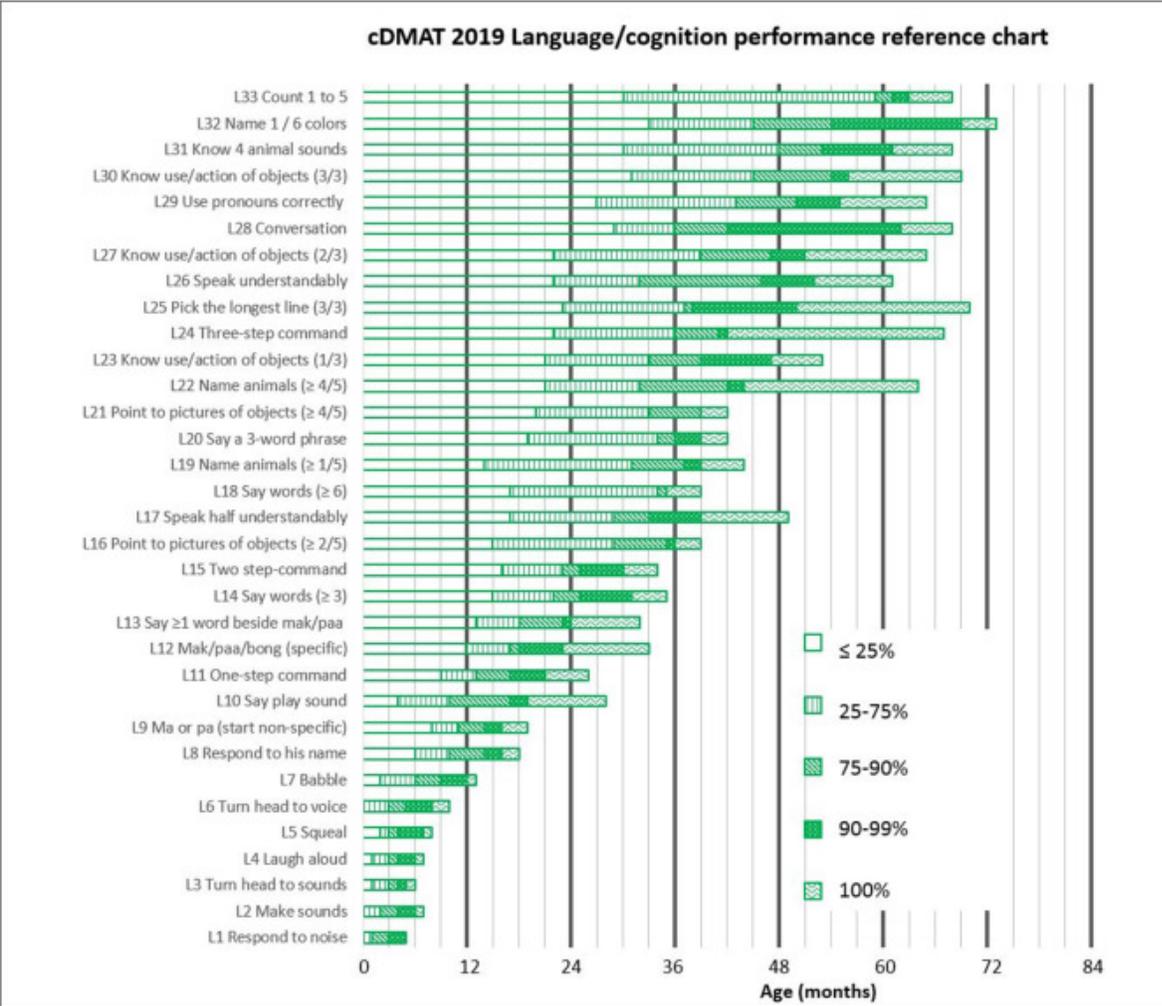
Instructions

- 1 - Collect demographic information on the child and determine the child's age in months.
- 2 - Start assessing the child in this order: social/personal, fine motor, language/cognitive, and gross motor. The milestone from where to start in each domain at a specific age in months is indicated in 'start x m'.
- 3 - Check 'PASS' if the child passes the skill, 'FAIL' if the child fails the skill and 'NA' when the skill is not assessed (e.g. child is unable to perform or caregiver does not know whether (s)he can perform the skill).
- 4 - Apply the 4 consecutive Pass rule at the start. If the child fails, assess previous milestones till the skill is passed. The 4 consecutive Fail rule allows the assessor to stop assessing more advanced skills as they are expected to fail all.
- 5 - Indicate the child's performance. The value in the 99+ column is the age in months when almost all Khmer children are able to perform the skill.

cDMAT 2019 – performance reference graph



cDMAT 2019 – performance reference graph



Community-based (CB-DMAT)

Features:

- 1 item per domain
- 10 age-groups
- Age 6 months – 6 years
- 99% pass in cDMAT
- 1-page tool
- 2 minutes
- Used in community (health centers, schools)
- Could assist parents to follow the progress of their child

Community Based-DMAT (CB-DMAT)
Age 6 months - 6 years



6 months		By age 6 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Smile responsively? Follow object passed midline? Turns head to sounds? Head up 45 degrees? 	<input type="checkbox"/>	<input type="checkbox"/>	
9 months		By age 9 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Explore environment? Follow object 180 degrees? Squeal? Chest up with arm support? 	<input type="checkbox"/>	<input type="checkbox"/>	
1 year		By age 12 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Recognize stranger? Rake lotus seed (≥1 /3 attempts)? Sit without support (≥10 sec)? Pull up to stand (≥2 sec)? 	<input type="checkbox"/>	<input type="checkbox"/>	
1.5 years		By age 18 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Hold and drink from cup? Transfer objects between hands? Say 'Ma' or 'Pa' (non-specific)? Walk alone (≥5 steps)? 	<input type="checkbox"/>	<input type="checkbox"/>	
2 years		By age 24 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Play 'woh...vak-eu'? Bang 2 objects together? Say at least 1 word besides mak/paa? Stoop and recover? 	<input type="checkbox"/>	<input type="checkbox"/>	
2.5 years		By age 30 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Use spoon? Point to 2 body parts? Take object with thumb / index finger? Run with good balance (≥2 meters)? 	<input type="checkbox"/>	<input type="checkbox"/>	
3 years		By age 36 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Put on simple clothes with help? Scribble with pencil? Say ≥ 6 words? Walk backward (≥2 steps)? 	<input type="checkbox"/>	<input type="checkbox"/>	
4 years		By age 48 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Play well with others (sharing)? Wiggle with thumb? Know use a cup or spoon? Kick ball forward? 	<input type="checkbox"/>	<input type="checkbox"/>	
5 years		By age 60 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Dress without help ((un)button)? Speak unstandably to outsider? Use pronouns correctly (me, you)? Throw object overhand? 	<input type="checkbox"/>	<input type="checkbox"/>	
6 years		By age 72 months, your child can:	yes	no	If one or more "no", refer to specialist
		<ul style="list-style-type: none"> Play kid games (team/wait turns)? Catch soft ball? Count 1 to 5? Straight heel-to-toes walk (≥4 steps)? 	<input type="checkbox"/>	<input type="checkbox"/>	

cDMAT website: <http://cdmat.org/>



[Home](#) [History](#) [Meet the Core Group](#) [cDMAT Projects](#) [Gallery](#) [Upcoming Events](#) [Contact Us](#) 

Welcome to the cDMAT Project

The Cambodian Developmental Milestone Assessment Tool (cDMAT) Project aims to develop a culturally-sensitive and environmentally appropriate tool that assesses the milestones of Cambodian children.

To explore more about the cDMAT and its implementation, we encourage you to browse through our website's menu above.



cDMAT recognition



Contents lists available at ScienceDirect

Early Human Development

journal homepage: www.elsevier.com/locate/earhumdev




Cambodian Developmental Milestone Assessment Tool (cDMAT):
Performance reference charts and reliability check of a tool to assess early
childhood development in Cambodian children

Chanpheaktra Ngoun^a, Piet De Mey^b, Klaus Baesel^b, Rachana Khoeun Khann^a, Lina Saem Stoeys^{a,*}

^a Angkor Hospital for Children (AHC), Tep Vong & Um Chhay Street, Mondul 1, Srey Dangkum, PO Box 50, Slem Reap, Cambodia
^b Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), GIZ Office Phnom Penh, #17, Street 306, Phnom Penh, Cambodia



cDMAT contracts and translation status

- cDMAT translation (Pheaktra)
- Family stimulation guide (Piet)
- CB-DMAT translation and cDMAT graphs
- PT manual translation
- Training video by filming cDMAT assessments
- Android application
- Update on research funding (Jessica)
- Other translation?



cDMAT activities in 2020

- Finish translation tasks
- Talks with MOH and NPH
- Continue implementation phase
- Disseminate cDMAT in conferences and talks
- Promote CB-DMAT
- Apps refinement linked to clinical needs and research link
- Recruit new members to cDMAT Core Group
- Next cDMAT Core Group Meeting in May 2020

cDMAT | Cambodian
Developmental
Milestone
Assessment
Tool

អរគុណ
Thank you

