An evaluation of the CareUp first design cycle: Aug-Dec 2016

EXECUTIVE SUMMARY

11th April 2017

Kelello, in partnership with Centre for Education Practice Research (CEPR), University of Johannesburg

Nicky Roberts and Garth Spencer-Smith
071 525 8389
nicky@kelello.org

What is CareUp?

The CareUp project is a mobile communication intervention initiated by the Department of Social Development in the Western Cape, and jointly funded by the DSD-WC and Innovation Edge. It targets both

- practitioners at Early Childhood Development (ECD) centres working with classes of 4 to 5-year old children; and
- parents of the children in their class.

CareUp aims to support quality communication between the parent, caregivers and their children.

The CareUp project concept and planning was initiated in the 2015/16 financial year. The implementation of the intervention's first design cycle was from August-December 2016. It involved testing the intervention in ten ECD centres in Cape Town and surrounds in the Western Cape. The ECD centres were located in four communities:

- Khayelitsha,
- Philippi,
- Stellenbosch and
- Mitchell's Plain.

The quantitative data on uptake and use of the CareUp application and mobi-site is from all four of these communities. However, all the qualitative data collected for this evaluation restricted attention to isiXhosa sites. All interactions with ECD practitioners, parents and children in Philippi and Khayelitsha, were conducted by isiXhosa-speaking researchers with the participants in the ECD centres.

CareUp Theory of Change

Children in disadvantaged communities are typically not exposed to quality ECD services, resulting in poor levels of literacy and numeracy which impact long-term educational outcomes. Further, many parents and caregivers lack an understanding of the important role they can play in stimulating their child's early learning through simple everyday interactions.

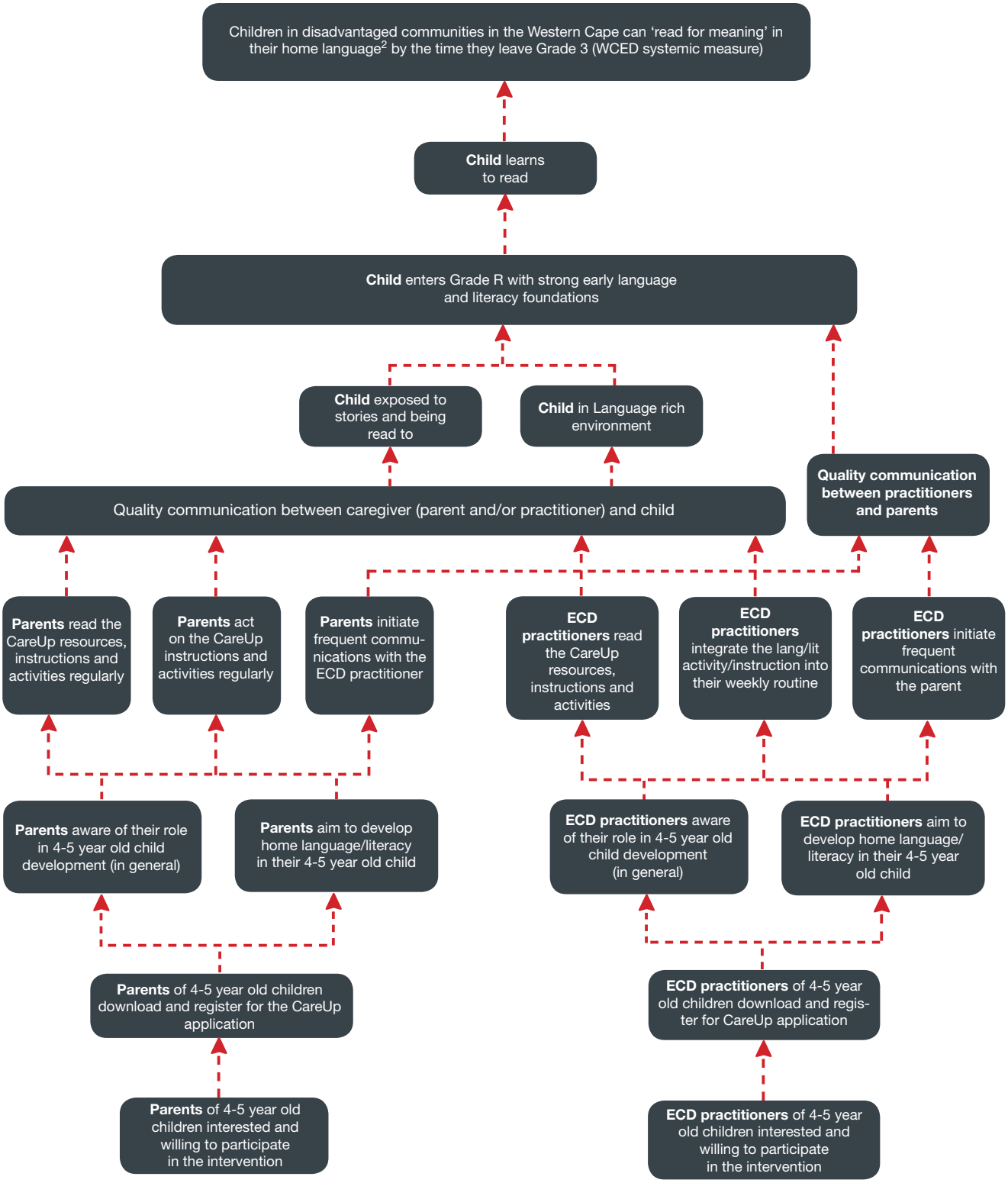
When primary caregivers stimulate early childhood development in language and literacy, a long-term improvement in a child's educational outcomes –particularly the ability to 'read for meaning'- is expected. Through the literacy/language resources, instructions and activities received via the CareUp mobile application, parents will be made aware of their critical role in developing their 4-5 year old children, particularly in the area of home language. If the CareUp instructions are internalised and the activities practiced, then a rich home language environment for their 4 to 5-year old children will be created. Similarly, the CareUp application will provide quality resources and activities for ECD practitioners, which if used regularly by means of incorporation into the daily ECD Centre routine, will ensure a rich home language environment for the 4 to 5-year old children in their care. The co-ordination of activities across the home and preschool spaces will serve to strengthen the impact of the intervention in each.

Such home language-stimulating, quality-communication home and pre-school environments will result in the children being more proficient in their home language when entering Grade R.

Moderating factors that may restrict the caregiver's ability to benefit from the intervention include lack of interest or confidence in signing up for the service and/or attending Educare meetings and/or communicating frequently with their child's teacher; lack of access to an Android phone; and a lack of data to upload responses. Challenging home circumstances may also play a part in preventing caregivers from fully engaging with the app and associated resources.

THEORY OF CHANGE

CareUp Intervention[1]



[1]This ToC applies to the CareUp mobile app, v1.0
[2]Limited to English, Afrikaans or isiXhosa

CareUp Partners

Government and funding partner:

Western Cape Department of Social Development

Funding partner:

Innovation Edge

Technology partner:

The Reach Trust

Content partner:

Wordworks

Research partner:

Kelello in partnership with University of Johannesburg

The CareUp intervention comprised of (1) The CareUp application, which can be used on an Android phone or CareUp mobi-site for a feature phone; and (2) the activation process.

'I like the stories that are on the App, it's like you have a mobile library on your phone.'

1. The CareUp application

CareUp is a mobile application comprising of 8 messages per week which directs parents and practitioners of 4 to 5-year olds to instructions, activities and resources which encourages early literacy development.

2. The CareUp activation process

The following activation process was adopted:

Letters and 2 SMSs were also sent out before the follow-up Saturday morning activation workshop approx. 2 months later

6. Saturday morning activation workshop (wifi; transport money; tea and lunch; free 100 mB of data; and a 'goody bag' of stationery and educational items.)

Letters were sent home with parents inviting them to the workshop (the week before the workshop), as well as an invitation SMS that was sent out on the Thursday before the workshop, and a reminder SMS was sent early on the morning of the workshop.

Data was purchased on 5 additional occasions (after handing over the Zest phone which was already loaded with data): 30 August 2016 (R59), 13 October 2016 (R29), 31 October 2016 (R29), 24 November 2016 (R29), 8 December 2016 (R29).

3. Visit 3: Practitioners loaned a smartphone (Zest T1), loaded with R59 data.

2. Visit 2: ECD centre buy-in with The Reach Trust

1. Visit 1: ECD centre buy-in with Department of Social Development

Research design

Design-based research methods were applied. The first intervention cycle was a proof of concept with focus on improving the design of the application and how it was integrated into communities. The evaluation sought to develop and test evaluation tools and monitor approaches which can be adopted by the project team if and when the programme intervention is expanded to reach to a wider scale.

The design employed mixed methods in that both qualitative and quantitative data was utilised to answer the evaluation questions.

Data collection for CareUp evaluation

Project partners n=5	Instruments	Baseline Interview	Endline Interview
CareUp uptake and usage data Evaluation focused sites (n=10)	Practitioner uptake and usage data (n=15)		
	Parent uptake and usage data (n=120 signed up)		
4 ECD Practitioners at 4 case study sites 1 practitioner per site, n=4	Baseline interview		Endline Interview
	Baseline site visit, lesson observation and pre-post interview on lesson		Endline site visit, lesson observation, and pre-post interview on lesson
Parents (from 4 sites)		Parent feedback session short survey (n=85)	
	Baseline parent telephone survey (n=19)		Near-endline parent focus groups (n=23)
CareUp case study parent-child Purposive sample of parent-child. Case selection: n=3 best use, n=2 minimal use		Near endline parent home-visit interview and observation of activity use (n=5)	

Key Findings

Progamme Implementation

Finding 1: The project has largely been implemented as planned, with most of the changes being of a minor nature.

Finding 2: The changes made to the implementation plan were almost all positive and made in the spirit of the iterative nature of this trial phase.

ECD Practitioners

Practitioner engagement with CareUp

Finding 1: There was an outstanding level of uptake by the practitioners with 15 out of 16 practitioners signing up.

Finding 2: Usage by the practitioners was very good, and indicates a sustained engagement with CareUp over (almost) the full 15 weeks.

Over the fifteen weeks of the first design cycle:

- In all weeks barring the final one, at least 70% of the user practitioners accessed CareUp at least three times per week.
- Two-thirds of the practitioners (10 out of the 15) used the service at least 13 out of the 15 weeks (in fact, 40% used it every week of the pilot). This provides another indication of the sustained usage of the practitioners.
- The average practitioner opened 27.2 instructions, 25.8 activities, 35.7 Nal'ibali pages and 26.1 Wordworks pages (a total of 114.8 interactions with the CareUp application over 15 weeks)

Evidence of improving practitioners' knowledge

Finding 1: All the self-reporting data gathered from practitioners indicated that they thought their knowlege had improved.

Finding 2: All four case study teachers demonstrated improvements of their knowledge in relation to early language development and how to support early language development in their classes.

'The experience is very good, I know now how to talk with kids properly and also listen to what the kid had to say, even if they say something wrong, I encourage them to be right again.'

CareUp has improved practitioners' self-reported knowledge of child development…

'The little things that we take for granted are the important building block in kids' development like doing shopping list with them.'

'CareUp has assisted us a lot because in our time table they have added value to them, For example, we do the plan every Friday for the lesson that will be taught on the following week; it has help us to plan better for our lessons.'

Changing practitioners' practices

Finding 1: All four case study practitioners showed evidence of improvement in their knowledge and practice relating to early literacy learning.

'The project supports my work a lot because our book shelf does not have story books. Now I don't have to repeat the same story over and over again.'

'Parents know that kids are not in the Centre to eat and sleep. It helps them understand that kids learn many things in ECD's, [to] get involved and be part of kids' education as kids learn in all their surroundings.'

Parents

Parents' engagement with CareUp

Finding 1: The uptake and usage data for the parents group is also positive (but less positive than the practitioners), with a notably poor conversion from attendance at the on-boarding workshops to registered users. 348 were invited to the workshop, 120 (34%) signed up. Two thirds of the signed-up parents used the Android App, and the rest used the mobi-site.

Over the fifteen weeks of the first design cycle:

- For the parents, in most weeks around two-thirds of the user parents accessed CareUp at least three times per week.
- The mean (average) number of weeks that this group of parents was active was 6.4 weeks (slightly less than half the number of weeks in the pilot).
- The average parent using the CareUp application opened 14.7 instructions, 10.6 activities, 19.4 Nal'ibali pages and 12.7 Wordworks pages (a total of 57.4 interactions with the CareUp application over 15 weeks)
- The parent who used the CareUp activities the most, opened 47 activities, and the parent who used the CareUp instructions the most opened 57 instructions.

Finding 2: The CareUp activities and instructions were viewed positively by both parents and practitioners. Close to all (97%) of the 72 parents surveyed strongly agreed that they were 'more aware it is my job to help my child be ready for Grade R'. Further, all parents either agreed or strongly agreed that the CareUp intervention has meant that they know more about how to help their child learn at home, and what their child is learning at the school. In two-thirds or more of the cases, the agreement was strong.

All 14 parents in the focus groups strongly agreed that they had an important role to play in:

- Helping my child develop and be ready to be a learner at school; and
- Helping my child use and understand language

Finding 3: 8 of the 10 top users of the service were parents (who were not incentivised with phones or airtime)

'I love CareUp because it motivates us and gives us confidence to teach our child on our own now, to have that strong communication.'

Improving parents' self-reported knowledge

Finding 1: Parents self-reporting (n=19) showed shifts towards more positive perceptions of parents' knowledge. Parent could give examples of how CareUp supported them:

'We communicate a lot more than we did because of CareUp. If I ask him to get water often he's unable to say 'how much water?' in Xhosa and so I find opportunities to share the everyday Xhosa vocab with him'

'It's made me aware of my own Xhosa usage because I've come to realise that I mix a lot of English words when I speak and this has led to me consciously teaching my child the correct vocab.'

Parents reported that they have learnt…

'...I'm the first teacher and the school teacher is the second teacher and also as parent we can learn from the magazines how to be a good parent to your child. We learnt that we need to teach and educate our kids by the things that they see.'

'...how to raise a child and as parents we need to sit down with our kids and educate them and tell them stories.'

'...it's important that we assist our kids with their school work and teach them things that they don't know for example how they say words and how to take care of themselves, like tie-up their shoes.'

Changes in parents' self-reported practices

Finding 1: The parents (n=19) surveyed reported more frequent engagement with their children

Finding 2: All the data sources collected suggest that the CareUp intervention had a positive impact on the relationship between practitioners and parents/carers, and on the parents/carers themselves

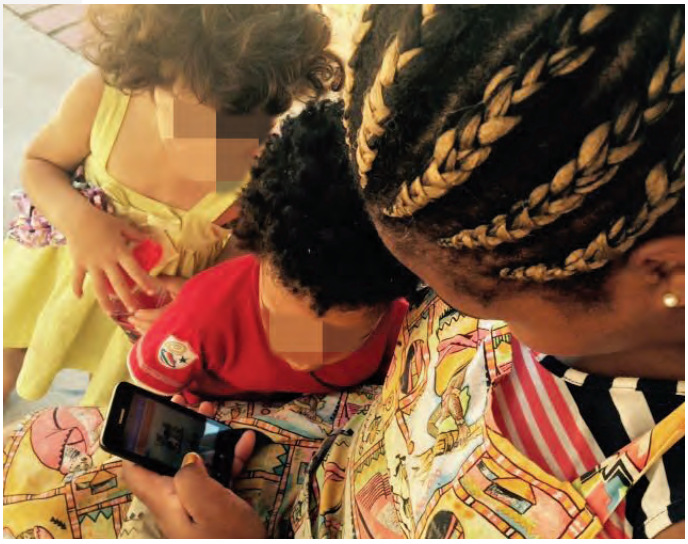
Finding 3: Analysis of five home visits to parents revealed that only one parent had deleted (or lost) the application. All four of the other parents could find the application, and use it to locate a story. They all managed to read a story from start to finish to their children.

Finding 4: All case study parents visited in their homes, reported positively on the benefits of the CareUp application to

- their child's language development,
- the ECD practioners' teaching approach to language development;
- their own reading habits; and/or
- their isiXhosa engagement with their child.

Finding 5: The home visits to case study parents provided some useful evidence of the high level of proficiency of the users group when accessing and navigating around the CareUp app.

Finding 6: Even where case study parents were not using CareUp themselves they commented positively on its benefits to their children and to the ECD practitioner.



Factors facilitating and hampering engagement

Finding 1: There were various factors that facilitated engagement with CareUp.

- The fact that people had visited the ECD centres where they worked at to introduce the CareUp project to them was a positive;
- The on-boarding workshop was also viewed in a positive light;
- The activities were useful to practitioners, which would clearly foster engagement;
- The application supported practitioners and linked to their work with children;
- None of the practitioners in any of the interviews or surveys, mentioned as a factor in their engagement with the project the provision of smartphones and free data. However, it is highly likely that without these, the exceptional usage by the practitioners would have been held back by the lack of access to a suitable device.

Finding 2: There were various factors that hampered engagement with CareUp.

- 66% of invited parents did not sign up
- The stories did not include enough pictures.
- For one practitioner the application was thought to add to her workload.
- For Parents, the lack of support in downloading the application was a problem.
- Technical problems, such as not being able to download the application, or not being able to find or reinstall the application, once downloaded.
- Some parents did not have Android phones or an internet connection;
- Some parents could not attend the on-boarding workshop.
- The messages came at an inconvenient time.

CareUp strengths and weaknesses

Finding 1: High-level stakeholders commented positively about CareUp and identified several strengths.

Finding 2: All four case study practitioners highlighted the benefit of the project to them as facilitating their work as teachers; and/or as benefitting children; and/or as involving the parents/carers in the children's learning.

Finding 3: The high level project managers were aware of some challenges that arose during the first design cycle of CareUp. (Such as stakeholder role confusion)

Finding 4: The four case study practitioners identified a few challenges. (such as the stories being too long and without sufficient pictures)

Lessons learnt

Lesson 1: It is worthwhile to start an intervention and adapt it based on feedback and experience.

Lesson 2: An initial period of incubation and experimentation with application development allows for a better product.

Lesson 3: Investing in monitoring and evaluation from the outset allows for reflection and improvement as the project is implemented.

Lesson 4: By monitoring and evaluating uptake and use closely in the first design design cycle, targets based on real data can now be set for future design cycles.

Lesson 5: Uptake will need to be supported in a less intensive (and expensive) manner in future.

Lesson 6: Encouraging usage is an ongoing investment and needs to be built into the application design.

Lesson 7: For potentially large-scale interventions like CareUp, ensure there is political will and buy-in.

Lesson 8: Content creation for an application requires investment, strategic decision-making and instructional design.

Lesson 9: Greater scaffolding is needed for parents to enable them to implement the activities as intended in order to get maximum benefit.

Lesson 10: There is a market (small but growing) for parents in poor communities to use Android applications.

Recommendations

Recommendation 1: Before the next design cycle, develop a detailed scope of work document and budget which defines the enhancements to the application functionality, the content and the activation and/or onboarding process.

Recommendation 2: Develop a detailed plan relating to the scaling up phase in the Western Cape, as well as plans for work in other provinces. This should link into the scope of work and budget referred to in recommendation 1.

Recommendation 3: Continue to invest in managing and maintaining good partnership relationships especially pertaining to government relationships

Recommendation 4: In future design cycles, ensure that there are opportunities for feedback and engagement with the targeted beneficiaries, to inform interations.

Recommendation 5: Invest in, and improve, the content development.

Recommendation 6: Explore extension from the focus on language/literacy to include other aspects of the integrated ECD curricula.

Recommendation 7: Consider supplementing the App with physical materials that support implementation of activities.

Recommendation 8: Include scaffolding for parents (and practitioners) - possibly through videos - to demonstrate how to implement activities

Recommendation 9: For version 2.0, include tech enhancements that were identified as necessary or nice-to-have.

Recommendation 10: Simplify the navigation structure of the CareUp application.

Recommendation 11: Develop ways to encourage participants to come back to the service once the initial interest has declined.

Recommendation 12: Link/integrate the app with other interventions, such as TLII.

Recommendation 13: Improve synchronisation of messaging, and enable multiple starting points.

Recommendation 14: Redesign the marketing process for CareUp in ways that will allow for cost-effective roll-out at a larger scale.

Recommendation 15: In the next design cycle (over a longer period of time) shift research attention to cost-effectiveness and impact on learner outcomes.

Conclusion

This evaluation process has provided an opportunity to innovate and experiment with data collection techniques and feedback mechanisms from the project implementers, the ECD practitioners and the parents of young learners. Looking across all the data sources it is clear that this intervention has been well conceptualised, and well managed within a complex web of interrelated partnerships. The feedback from beneficiaries – both ECD practitioners and parents - is overwhelmingly positive. This is supported by excellent uptake and use data from practitioners, and encouraging uptake and use data from parents. In our view CareUp is a stable enough offering, which has shown potential at a small scale to meet its goals. As such, CareUp ought to move into a second design cycle of roll out at a larger scale.

To cite this document: Roberts & Spencer-Smith (2017) An evaluation of the CareUp First design cycle: Aug-Dec 2016 - Executive summary, Soweto: Kelello, in partnership with University of Johanneburg Centre of Education Practice Research.