

What is in your hands?

Unleashing the power of digital health for hypertension control



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Acknowledgements: Evaluation and Insights team, UCLPartners

Background

Cardiovascular disease (CVD) is the leading cause of death globally, accounting for one-third of the burden for mortality¹. Hypertension (high blood pressure, BP) is the highest risk factor for CVD,² and is reducible through self-management. Digital health interventions have the potential to optimise BP control³, both in the UK and in developing countries.

Purpose of project

UCLPartners has a strategic focus on CVD, hence I collected information that would be beneficial both in addressing health inequalities in digital interventions locally (UK) and in understanding how interventions are delivered in other contexts. I completed a review of 40 studies^{5,6} in lower-middle-income countries and upper-income countries (like the UK) on digital health interventions used to control high BP.

UCLPartners has an **innovation pipeline**, where innovations are managed through stages from **insights** to **implementation and evaluation**, to harness research and innovation for better patient care and a healthier population. Findings are described through this pipeline to support each individual team in the organisation.



Insights

Understanding the problem

- 1 in 3 adults have high BP in England⁴
- 15% of high BP is untreated in England.
- 2/3 of the global burden of high BP is in LMIC⁵



Discovery

What is causing the problem

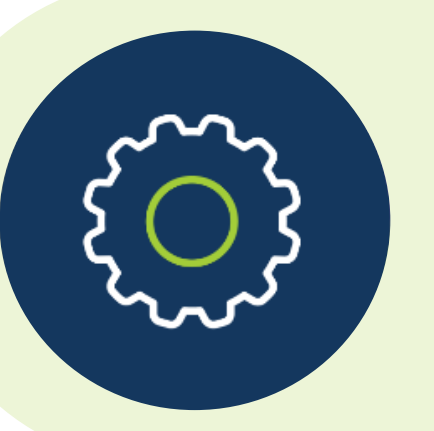
- Patient-related factors; Non-compliance to medications
- Health System factors: Inadequate Facilities
- Health Workers Factors: Disproportionate Number



Solutions

How can we solve the problem

- SMS and Phone Calls to remind patients about medication and BP measurements
- Mobile Phone Apps for BP recording
- Telemedicine to interact with providers



Implementation

How feasible is the solution

- Opportunities**
- A high percentage of mobile phone users
 - Patient involvement in healthcare

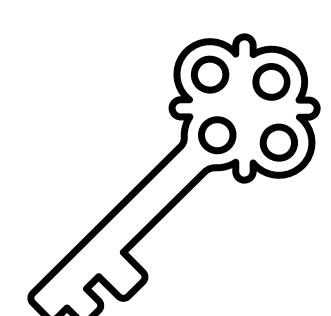
- Challenges**
- The need for translation into local languages
 - Accessibility to equipment like sphygmometers (blood pressure meters)



Evaluation

How do we measure our impact

- Surveys and Interviews with patients for feedback on interventions.
- Cost-effectiveness of interventions



Key lessons from LMICs

- **Multicomponent** (human coaching + app/SMS) interventions yield maximum results.
- Translation to **local dialects** reach diverse groups and also **prevent widening inequalities**.
- **Phone calls** could be used to bridge the literacy gap.
- **Students** (nursing, medical, pharmacy) can be used to **coach patients**.

Conclusion

Key lessons can be learned from the implementation of digital health interventions in LMICs to address health inequalities in uptake and outcomes for upper-income countries, like the local population of UCLPartners.

Please scan QR code to review references



Please scan QR code to learn more about UCLPartners' work



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