



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Health phone services in Papua New Guinea: lessons learnt for donors by Amanda H A Watson and Ralph Kaule



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Dr Amanda H A Watson

ANU-UPNG Partnership

Lecturer, Australian National University

Visiting Lecturer, University of Papua New Guinea

[www.ahawatson.com](http://www.ahawatson.com)

[amanda.watson@anu.edu.au](mailto:amanda.watson@anu.edu.au)

Twitter: @ahawatson



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Mr Ralph Kaule

Lecturer, University of Papua New Guinea

[rkaule@upng.ac.pg](mailto:rkaule@upng.ac.pg)



Photo: Mr Ralph Kaule conducting a research interview in 2017 (source: Watson)



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

The term telemedicine is typically limited to phone consultations between medical practitioners and patients (Zieliński, Duplaga & Ingram, 2006).

Telehealth is a broad term incorporating “telemedicine and a variety of nonphysician services, including telenursing” (Weinstein et al., 2014, p. 183).



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Papua New Guinea



Figure: Map of Papua New Guinea (source: geology.com)



Australian  
National  
University

# Telehealth

The  
University of  
Papua  
New  
Guinea



<b>Interviews conducted</b>	<b>Number</b>
Port Moresby	11
Mt Hagen	11
Rural WHP	2
<b>Total</b>	<b>24</b>



Australian  
National  
University

# Telehealth

The  
University of  
Papua  
New  
Guinea



<b>Interviewee sex</b>	<b>Number</b>
Female	11
Male	13
<b>Total</b>	<b>24</b>



Australian  
National  
University

# Telehealth

The  
University of  
Papua  
New  
Guinea



<b>Interviewee work experience</b>	<b>Number</b>
Doctor	2
Nurse	2
Rural health worker	4
Public health professional	6
Health administrator	4
Trained counsellor	1
Telecommunication company employee	5
<b>Total</b>	<b>24</b>



Australian  
National  
University

# Telehealth

The  
University of  
Papua  
New  
Guinea



<b>Interviewee telehealth experience</b>	<b>Number</b>
Currently works, or has worked, answering calls	2
Currently works, or has worked, managing a telehealth service	18
Experience as a client of a telehealth service (e.g. rural health worker)	1
Has not used a telehealth service	3
<b>Total</b>	<b>24</b>



Australian  
National  
University

# Telehealth

The  
University of  
Papua  
New  
Guinea



Sustainability is a key factor regarding innovations financed by aid.

In PNG, some aid-funded telehealth projects have been sustainable and are ongoing, whilst others have not been sustainable and have ceased to operate.



Australian  
National  
University

# Telehealth

The  
University of  
Papua  
New  
Guinea



What factors lead to failure and/or success of a telehealth service in PNG?



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

A key lesson learnt is that phone services which are open to the public are expensive, requiring long-term investment and strategic, sustained promotional activities.



Photos: Digicel call centre, Port Moresby (source: Watson 2017)



Australian  
National  
University

# Telehealth

The  
University of  
Papua  
New  
Guinea



“There has to be consistent flow of funding, especially for this, this program that there is continuation of service. [...] If programmes like call centre has to come in, there has to be sufficient budget for it .... to, you know, maintain its, ahh, maintain the services, and that’s vital.”

Source: Research interview



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

“Timing was .... I could say, it was short. And the lack of knowledge of people [as to] why the call centre existed, [meant that] everyone made mistakes. But if people had known and if we [had] operate[d] for a long time, the service delivery would be very, you know, effective.”

Source: Research interview

Translated from the following interview quote in both Tok Pisin and English:

“Timing was .... me gen tok olsem em shot. And the lack of knowledge of people why the call centre existed, ol man i bin faul liklik. But if people bin save na if we operate for a long time, the service delivery would be very, you know, effective.”



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

“All the rural villagers [...], they must understand why the call centre exists. If they know the reason for it, I think they will, you know, [ring]. So we have to have, ahh, people, ahh, .... have a lot of awareness in the villages, [about] why the call centre is existing, [and] the functions of the call centre, [so that] they can understand this.”

Source: Research interview

Translated from the following interview quote in both Tok Pisin and English:

“Ol lain long ples [...], olsem ol i mas understandim why call centre em i exist. Sapos ol i save long reason bilong dispela, me ting olsem olgeta bai wanemia, so we have to have, ahh, people, ahh, .... have a lot of awareness in the villages, why the call centre is existing, the functions of call centre. Ol ken understandim dispela.”



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

“Regarding questions, we talked and they understood. For example, like how HIV is transmitted. What is HIV? They would ask and we would say how it is transmitted. OK, ahh, what you can do to avoid infection. We would explain and they would take our advice about this and they would say thank you. So I see that whoever called received help, but those who didn’t call, didn’t.”

Source: Research interview

Translated from the following interview quote in Tok Pisin:

“Long ol askim em mipla sa toktok na ol i sa understandim. Example like how HIV em transmit. HIV em wanem samting? Ol sa askim na mipla sa toktok lo how em transmit, ok, ahh, wanem samting ba u wokim na yu bai abrusim disla. Em mipla sa explain na behain lo disla ol sa tok tenkyu. So me lukim olsem [mm] e’eh husait I call long em em i kisim helpim but husait ino call long em em nogat.”



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

Another key lesson is that phone services which are accessible only to health workers are less costly and can be beneficial in terms of improving health system efficacy and efficiency.



Photo: rural health facility, Milne Bay Province (source: Watson)



Photo: rural health worker, Western Highlands Province (source: Watson)



Photo: ambulance, Western Highlands Province (source: Watson)



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

“For the health workers, they get plenty of help through this. Like some, they didn’t know how to deliver the baby, mostly it was like maternal, child, ahh, childbirth, and they need help, and they ring. We ring ONG doctors, same hour, same time, they give advice, so then we ring go back [...] that’s the help they get straight away, so it’s just like we are talking face-to-face.”

Source: Research interview

Translated from the following interview quote in both Tok Pisin and English:

“Long sait bilong health worker tu em olsem ol i kisim planti helpim long dispela. Like some they didn’t know how to deliver the baby, mostly it was like maternal child ahh, olsem long karim pikinini na ol i nidim helpim na ol sa ring kam, em ol ONG doctors mipla ring, same hour same time ol sa givim advice, so then mipla sa ring go bek [...] em helpim em ol kisim straight away so it’s just like we are talking face-to-face.”



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

“There are some instances where our staff lives were in, uhh, under threat .... and .... just a phone call and it .... uhh, we, we save them from the threat, you see, amm.... previously we receive message, without a phone call, we receive message later that .... ohh the vehicle has been stolen, the staff were beaten up, all these.”

Source: Research interview



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

“[It’s a] very effective way of referring patients and talking with and readying the health workers. We have phone numbers for all the health centres so we can ring and they can be ready. Because we were given all the numbers for ringing them, so we can ring and say ‘oh, a patient is coming, you [...] wait for them’. [...] So it’s effective assistance.”

Source: Research interview

Translated from the following interview quote in both Tok Pisin and English:

“Very effective way of referring patients na toktok wantaim narapela wokman mipela redim em long hapsait. Like mipela gat olgeta fon namba bilong olgeta health centre i stap so mipela sa ring na ol sa expectim na stap. Because ol givim mipela ol namba long ringim ol lain tu so mipela ring na tok ‘oh patient kam lo dispela, yu [...] wetim em’. [...] So em bin helpim effectively.”



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Telehealth

In conclusion, PNG, with its stretched health system, cannot resource a health call centre for the public to ring for health advice or information.

Nonetheless, strategic use of phones between health workers has demonstrable benefits.



Australian  
National  
University

The  
University of  
Papua  
New  
Guinea



# Health phone services in Papua New Guinea: lessons learnt for donors

by Amanda H A Watson and Ralph Kaule

[www.ahawatson.com](http://www.ahawatson.com)

[amanda.watson@anu.edu.au](mailto:amanda.watson@anu.edu.au)

Twitter: @ahawatson

[rkaule@upng.ac.pg](mailto:rkaule@upng.ac.pg)

