



**UNIVERSITY OF  
CALGARY**

**University of Calgary**

**PRISM: University of Calgary's Digital Repository**

---

Research Centres, Institutes, Projects and Units

E-Health Resource Repository

---

2002-10

## Using Case Study Methodology to Evaluate E-Health

Siedlecki, Basia; Jennett, Penny Dr.; Graham, Russell

---

Siedlecki Basia, Jennett Penny Dr., and Graham Russell. 2002. Using Case Study Methodology to Evaluate E-Health. Presented by Basia Siedlecki at the Canadian Society of Telehealth Conference in October 2002.

<http://hdl.handle.net/1880/43107>

Presentation

---

*Downloaded from PRISM: <https://prism.ucalgary.ca>*

# Using Case Study Methodology to Evaluate E-Health

Basia Siedlecki – Doctoral Candidate (U of C)

Dr. Penny Jennett - Head, Health Telematics Unit  
(U of C)

Russell Graham – Malloch Graham + Associates

# Overview

- Case Studies: what are they?
- Case Studies and E-Health: context and measure.
- Case Studies in the Yukon: application.
- Preliminary results: Yukon case studies

# Case Studies: what are they?

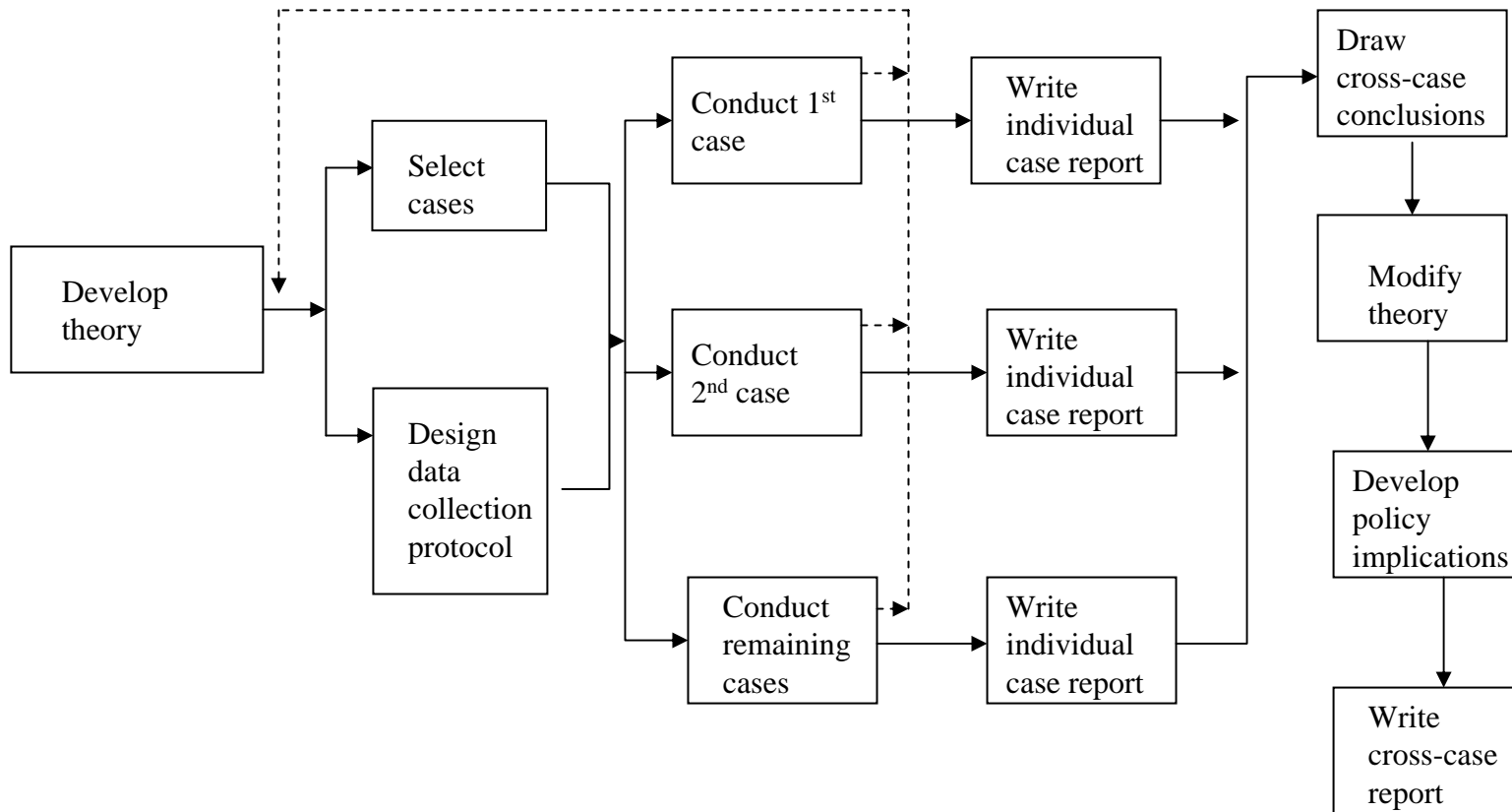
*A case study is an empirical inquiry that*

- investigates a contemporary phenomenon within its real-life context especially when
- the boundaries between phenomenon and context are not clearly evident (Yin, 1995)
- relies on multiple sources of evidence, with data needing to converge in a triangulating fashion

# Case study

- Case study = experiment
- Starts with a theory:
  - What is to be explored
  - Purpose of exploration
  - Criteria by which exploration is to be judged
- Analytic not statistical generalization
  - Literal and theoretical replication

# Case study method



# Case Studies in the Yukon: application

- 5 remote communities using e-health are being compared over 1 year: ongoing
- Communities differ in:
  - Accessibility
  - Composition
  - Size
  - Geographic location
- Each community is a case

# Case Studies in the Yukon

- 3 major applications:
  - Telelearning
  - Emergency x-ray support
  - Tele-family visitation
- Mental health
- Various other applications
  - Peer conferences
  - Etc.



# Case Studies in the Yukon

- Each case has units of analysis:
  - Health care workers
  - Community members
  - Local government and business
  - Family and clients
  - Decision makers/administrators
- Each unit of analysis: various methods of study

# Case Studies in the Yukon

- Quantitative methods:
  - Evaluation forms (post use)
  - Encounter log forms
- Qualitative methods
  - Interviews
  - Focus groups
  - Open-ended questions on forms

# Case Studies in the Yukon

- Context:
  - Generic applications in varied contexts.
- Cross-case questions:
  1. Is there a difference between the five selected communities in terms of the effects of the telehealth applications?
  2. Based on such factors as community size, location, accessibility and composition, why are the effects of telehealth uncovered in the five case studies similar? Why are they different?

# Preliminary Outcomes

- Response positive
- Use varies
- Case studies focus on local idiosyncrasy vs. global response
- Diverse methodologies enrich data/complicate analysis - use of effects matrix
- Useful in context of diverse population – systemic applications of e-health