
Childcare Study



Edgardo & Zalia

Overview

- Introduction
- Method
- Demographics
- Codes
- Design Implications for Security
- Summary
- Q & A



Introduction

- Pilot studies conducted this summer
- Keeping and maintaining records is a growing concern
- Current system is paper
- We are studying how information is shared, documented, and evaluated in child-cares.

Method

- Grounded theory



- Interview lasting about 30 minutes

Demographics

- Interview 21 parents (7/14/2009 - 9/30/2009)
- 18 Female 3 Males
- 2 in after school only rest in full time
- 1.29 average number of children
- 13 months in current childcare on average
- Two were single parent
- All other had partners

Codes

Ambient Information	Attitudes about sharing sensitive information	Breakdowns	Child Provided Information	Communication method
Enrolling Information	Expiration	Face-to-face	Happy or Unhappy with childcare	Leaving a childcare
Light-bulb moments	Ownership	Partner	Policy Violations	Pre-enrolling practices
Reassurances	Reports	Security	Social-service intervention	Trust
	Unusual Occurrence		Want to provide more information	

Codes

**Ambient
Information**

**Attitudes about
sharing
sensitive
information**

Breakdowns

**Child Provided
Information**

**Communicatio
n method**

**Enrolling
Information**

Expiration

Face-to-face

**Happy or
Unhappy with
childcare**

**Leaving a
childcare**

**Light-bulb
moments**

Ownership

Partner

**Policy
Violations**

**Pre-enrolling
practices**

Reassurances

Reports

Security

**Social-service
intervention**

Trust

**Unusual
Occurrence**

**Want to
provide more
information**

Enrollment

■ General

- Name, Birth date/Certificate, Emergency contact, **SSN**, Child's like and dislike

Sensitive Information

■ Family Information

- Parents' contact, Employment,
- Background, Siblings

■ Health Information

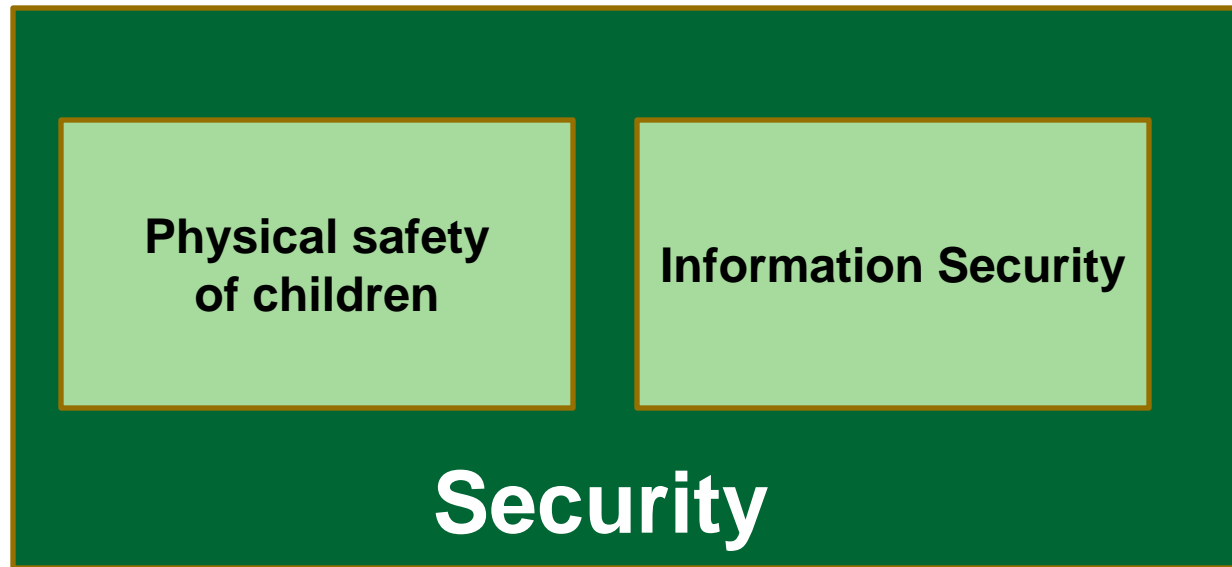
- **Immunization record**,
- Health insurance info, **Medical conditions**, Allergies



Additional Information

- ❑ Special needs (Speech disability, handicap)
- ❑ Language and cultural information (Bilingual)
- ❑ Psychological family condition (Other child's death, parents' divorce)

Security



Physical Safety of the Children

- ❑ Buzzer/bell at entrance
- ❑ Door lock: Pin / card
- ❑ Web-camera
- ❑ Central monitoring System
- ❑ Signature sheet for drop in and pick up
- ❑ Emergency list



Information Security

■ Storage

- Locked file cabinet
- No one sure if the information are stored digitally



■ Access

- Only two parents are informed about access (Emergency listed people)
- Others believe daycare officials have

■ Share

- Parents believe daycares will ask them before sharing their information

■ Expiration

Parents

- Want to keep only name, contact and enrollment time in file after leaving the childcare
- Believe their information will eventually be disposed.



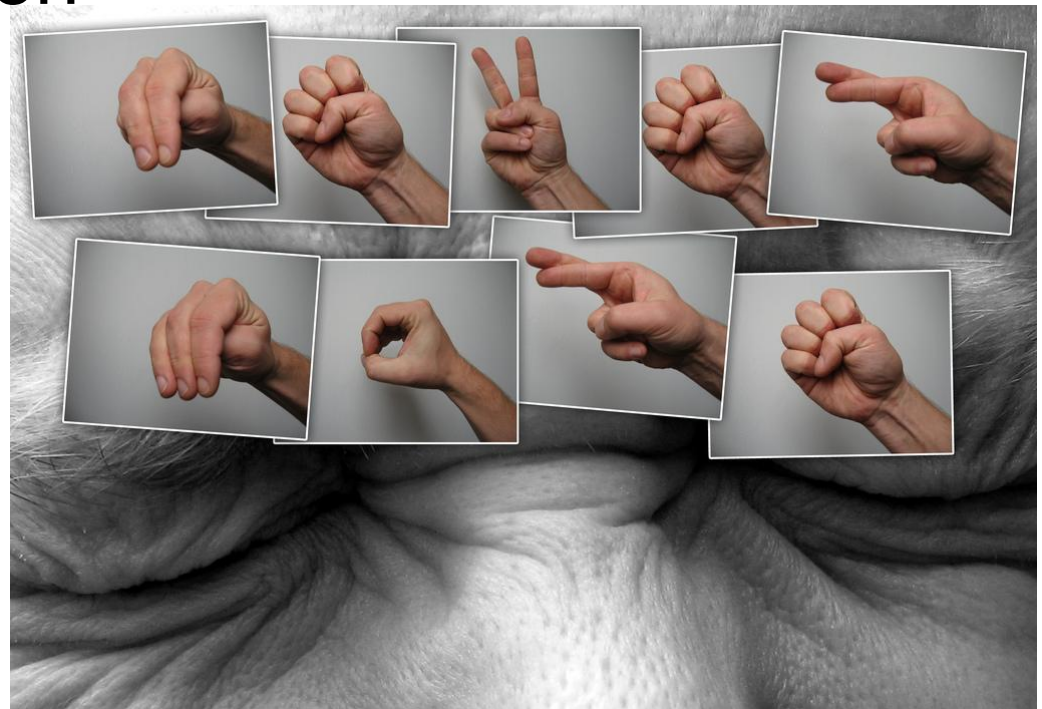
Trust



- Parents generally trust daycares.
- Personal relationship rather than information practice is the basis of their trust.
- Security system of daycares has impact in their trust
- None but participant 13 and 14 faced information security breach.
- **Single incident** of security breach leads to **unrecoverable bad impact** on trust

Communication

- Face-to-face
- Physical reports
- Ambient Information



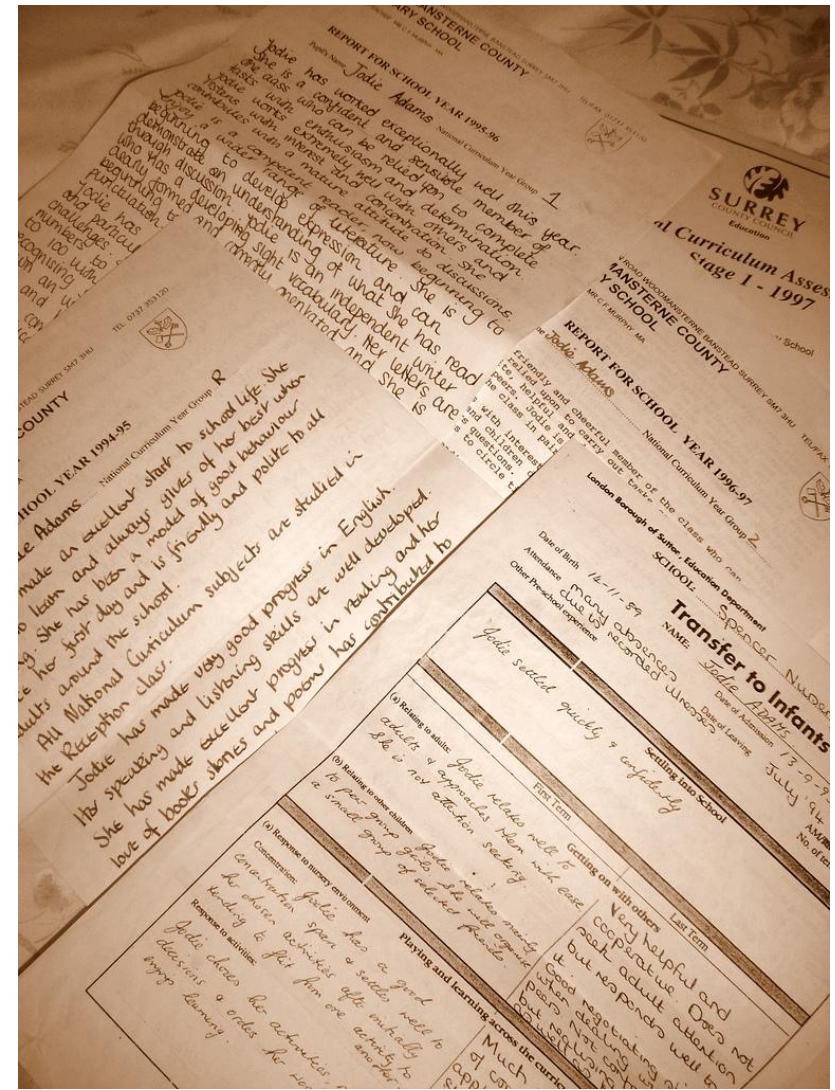
Face-to-face

- Main communication method by all 21 participants
- Preferred method
- Expect verbal report of the status of their child



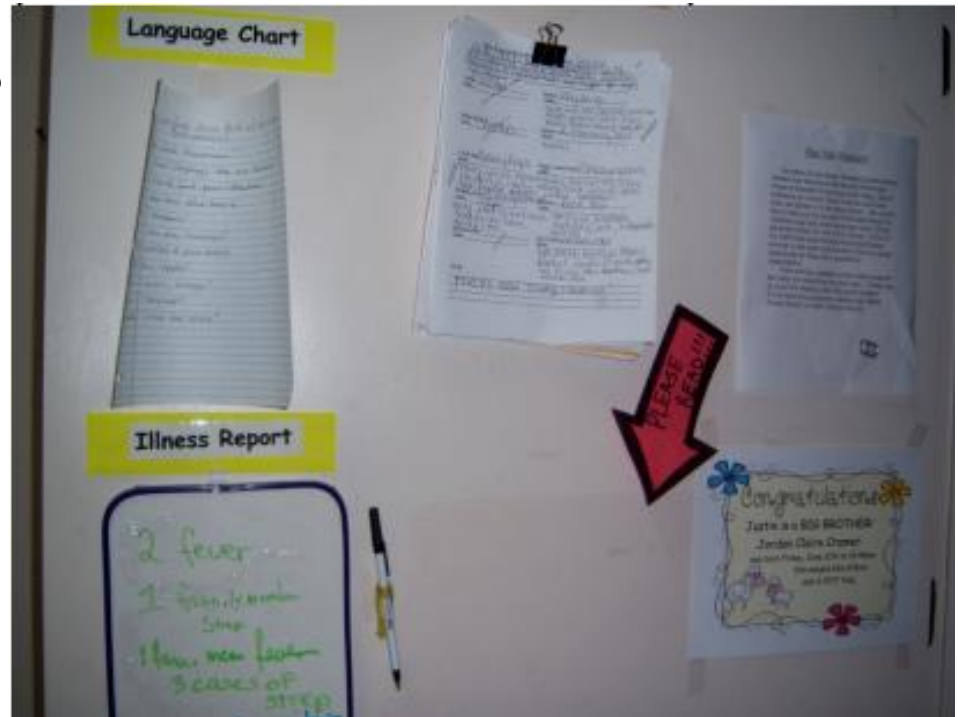
Physical Reports

- Mentioned by all
- Specific Child Information
- Information About the Childcare
- Secondary Information



Ambient Information

- 15 participant mention receiving information this way
- “[the] majority of their information is all posted. Cork boards display boards all through the entrance way”



Breakdowns

- Whenever a communication, interaction, or a critical incident has occurred
- 14 participants mention this
- 5 participant left childcare after a breakdown



Light Bulb Moments

- Just over half of participants
- "You know, I've never really thought about it."



Design Implications for Security

- Supporting rich communication and reporting in both directions
- Take the information the parents have and explain how and why this information is needed
- Provide access logs to all parties' information

Summary

- Technology continues to fill our lives, it is becoming more ubiquitous
- Parents have a large amount of trust in the childcares information security practices
- Large emphasis on the ability to communicate with the childcare effectively

Q & A