

Cognitive impact of research-based synopses delivered on email (PUSH) vs. retrieved on handheld computer (PULL)



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CONTEXT

The validity of the Information Assessment Method (IAM) is examined in research-in-progress. IAM documents the cognitive impact of research-based health information delivered on email or retrieved on computer.

OBJECTIVE

To compare the cognitive impact of tailored synopses of peer-reviewed research, in the context of email (PUSH) vs. information retrieval (PULL).

DESIGN

Prospective, observational

SETTING

Family practice

PARTICIPANTS

41 Family / General practitioners

INTERVENTION

Participants asked to rate InfoPOEMs[®] in two contexts:

1. Received on email (PUSH) or
2. Retrieved from InfoRetriever[®] (PULL), a search engine over resources such as InfoPOBMs[®]

PUSH:

156 InfoPOBMs[®] delivered in 289 days.

PULL:

Concurrently, information searches are tracked on handheld computer.

OUTCOME MEASURES

Number and type of ratings of cognitive impact.

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RESULTS

PUSH: FPs submitted 3,755 ratings of InfoPOBMs[®] delivered as email (range 11-154 InfoPOEM ratings per FP). In a 'push' context, the cognitive impact of InfoPOEMs[®] is mostly about learning.

- *I learned something new* was reported in 57.5% of all ratings in 'push' vs. 46.9% in 'pull'
- *A problem with this information* was reported more frequently in 'push' than in 'pull' (6.0% vs. 0.9%)
- About one in 5 delivered InfoPOEMs[®] had '*no impact at all*' (20.9%)

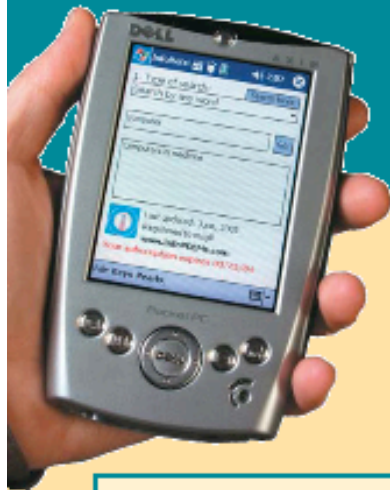
PULL: FPs rated 615 unique InfoPOBMs[®]. In a 'pull' context, the cognitive impact of InfoPOEMs[®] is more about reinforcement of practice and practice change.

- *This information confirmed I did (will do) the right thing* – 43.4% in pull vs. 31.3% in push
- *My practice was (will be) changed and improved* – 36.6% in pull vs. 21.0% in push

CONCLUSION

Preliminary results suggest a different cognitive impact of InfoPOEMs[®] in a 'push' and a 'pull' context. Once data collection is complete, statistical models will be used to account for dependence in ratings arising from multiple ratings from each participant and multiple ratings for some InfoPOBMs[®].





Negative cognitive impact reported by family physician users of electronic knowledge resources

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Problem

Physicians have concerns about synopses of research-based health information.

Question

Using the Information Assessment Method (IAM), how frequently do family physicians report negative feedback about synopses?

Objective

To examine reports of negative cognitive impact when physicians receive synopses on email (PUSH context) or retrieve synopses in databases (PULL context).

Methods

DESIGN: Prospective, observational, mixed methods study.

SETTING: Canadian family practice.

PARTICIPANTS: 40 family physicians.

INTERVENTION: Participants were asked to rate InfoPOEMs[®] received on email (PUSH) and retrieved on handheld computer (PULL).

• PUSH: 58 InfoPOEMs[®] were delivered in 101 days (from January 7 to April 16 2008), and were eligible for rating.

• PULL: 253 different InfoPOEMs[®] were rated on handheld computer in 133 days (from December 6 to April 16 2008).

OUTCOME MEASURES: Number and type of negative ratings in PUSH and PULL contexts, using the Information Assessment Method (IAM).

Results

NEGATIVE RATINGS OF RESEARCH-BASED SYNOPSES (INFOPOEMs [®])		
Reports of	PULL (N=302)	PUSH (N=1521)
I was dissatisfied as there was a problem with this information	N=4 (1.3%)	N=116 (7.6%)
Too much information	N=0	N=0
Information too technical	N=0	N=1
Information poorly written	N=0	N=15
Not enough information	N=1	N=62
Other problem	N=3	N=83
I think this information is potentially harmful	N=3 (1%)	N=30 (2%)
I disagree with this information	N=3 (1%)	N=22 (1.4%)
N = Number of rated InfoPOEMs [®]		

Conclusion

- Reports of negative cognitive impact are infrequent.
- Preliminary results suggest negative reports are more frequent in a PUSH context than a PULL context.
- Further analysis and interviews with participants will contribute to a better understanding of these reports.



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by Colleen Kirkham — last modified 2008-11-21 12:41 PM

[KT Clearinghouse -Information Assessment Method](#)

(Dr. Roland Grad, McGill University): can be used as a teaching tool, to document the cognitive impact and use of health information in residency



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Information Assessment Method

Information Assessment Method (IAM)
Submitted by: Roland Grad MD MSc, Associate Professor, McGill University, Herzl Family Practice Centre

Attachment	Size
PowerPoint Presentation	247 KB
Screen Shots (Zip Archive)	620.6 KB

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