

The quality of medication information imparted at acute hospital discharge

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Introduction

- Establish the evidence base
- Level and functioning of services
- Roles and responsibilities of pharmacy staff
- Drivers for and barriers to improving provision and service delivery



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The Evidence Base

Admission medication history taking and rationalisation

Admission med hx taking in A&E/ admissions unit

Discharge medication rationalisation and verification

Communication of unambiguous med info to next HCP

Patient counselling on discharge medication

Medication compliance aids/ reminder charts



Please see sheet attached outlining the evidence base.

Black shading = strong evidence base
White shading = weak evidence base

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Methods

- Mixed methods approach ^{*}, #
- Survey instrument
 - Telephone interview
 - All acute public hospitals
 - Chief pharmacist or his/ her nominee
 - Semi structured, closed & open ended questions
- In depth face to face interviews
 - Snowball sampling technique ~
- Triangulation, complementarity ^{*}, #



Refs:

* Lynne Johnston P. Mixed methods, mixed methodology health services research in practice. Qual Health Res 2004; 14: 259-271

Smith F. Triangulation. Health services research methods in pharmacy. Int J Pharm Pract 1999; 7: 60-8

~ Bowling A. Research methods in health: investigating health and health services. Open University Press, Berkshire UK 2001.

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Analysis

- Quantitative
 - Coded numerically
 - SPSS® version 15 for support in analysis
- Qualitative
 - Audiorecorded, transcribed verbatim
 - QSR NVivo 7® for support in coding & analysis
 - Framework method[‡]



Refs:

‡ Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In Huberman AM, Miles AB. The Qualitative Researcher's Companion, Sage Publications, London, 2002.

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Results

- Response rate
 - 95% response rate
 - 1 declined to take part; 1 non-contactable
 - 36 interviews
 - 32 chief pharmacists, 4 nominees
- In depth interviews
 - 14 interviews, informants all pharmacists
 - Across 7 hospitals
- Transferable and reliable



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Findings and Discussion

- *“Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients”.*

Sackett DL *et al*, BMJ 1996 [‡]



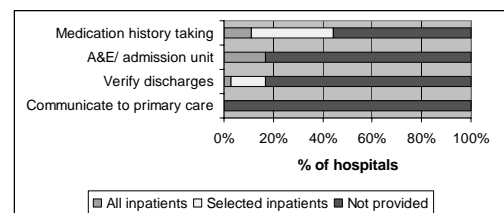
David Sackett, the 'father' of EBM defined evidence based medicine in 1996 as follows: 'the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients'

Ref:

[‡] Sackett D, Rosenberg W, Gray J, Haynes R, Richardson W. Evidence based medicine: what it is and what it isn't. BMJ 1996; 312:71-72

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Pharmacy services delivered



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Minimal input at discharge

- Ad-hoc or resource dependent:
 - Patient counselling at discharge
 - Medication compliance aids
- "Ad-hoc"???



Refs:

Green CF, McCloskey S. UK survey on the provision of multi-compartment compliance aids and medicines reminder charts on discharge from hospital. *Int J Pharm Pract* 2005; 13 (1): 85-90

Irish hospitals do not dispense medication at discharge

- 97.2% dispense no medication to general medical or surgical patients
- Ad-hoc supply
 - To selected patients
 - In exceptional circumstances



There is gross variation in staff levels and problems with recruitment



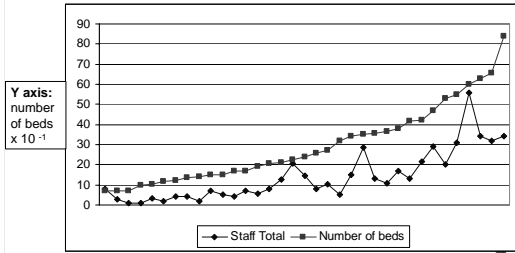
Refs:

Acute Hospitals Portfolio – Review of national findings on medicines management. 2004. Audit Commission

- 28% of departments have vacant posts
- 5.6% operate as sole-practitioners

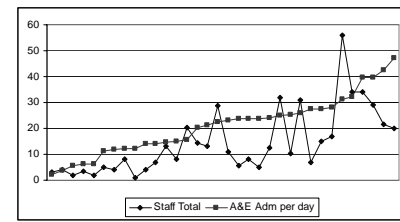


Staff levels not proportional to the number of beds



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... nor commensurate with A&E admission activity



Source: www.hse.ie A&E activity archive



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Wide variation in skill mix

- Traditional supply vs patient focussed clinical services
- Technicians
 - 5.6% do not employ any technicians
 - Pharmacist: technician ratio
- Pre-reg' pharmacists
 - 68% do not employ a pre-reg' pharmacist



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Qualitative analysis and interpretation



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Facilitators to change

- Risk management culture
- Professional responsibility
- Evidence
- Personal motivation



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Facilitators cont'd

- Multidisciplinary support
- Competence, education & training
- Professional boundaries/ limitations
- Technology



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Barriers to change

- Resources
- Staff deployment and skill mix
- Ward based vs team based model
- Multidisciplinary support
- Marketing
- Non standardisation of services
 - Poorly defined roles
 - Variations in standards of practice



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Barriers cont'd

- Absence of leadership/ strategy from policy makers
- Political agendas
 - Local, National
- Complexity of the problem



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Going Forward A Strategy for Change

- Standardisation of services
- Collaboration
 - Inter- and intra- professionally
- Marketing
- Staff deployment and skill mix optimisation
- Re-engineering of pharmacy services
- Technology
- Competence
- Research



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Summary

- Pharmacy services associated with positive health outcomes:
 - Admission med history taking and rationalisation
 - Discharge medication verification and rationalisation
 - Communication of med info to the next care provider
- Level of implementation in RoI hospitals is low
- Associated risks



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Future work

- Views of nursing and medical staff
- Align with organisational theories
- Further exploration with primary care providers



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