Barriers and Change Management

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International focus

"Professional services provided by pharmacists who use their skills and knowledge to take an active role in patient health, through effective interactions with both patients and other health care professionals" (Roberts' doctoral thesis 2005)

- Barriers to widespread implementation[3]

- Models and frameworks for change
  - Major focus on the individual and behaviours, often ignoring organisational factors[4]

- Facilitators of change
  - Many individual factors identified, little consideration of how they work together to optimise implementation[5]

1. Hepler C, Strand LM. Am J Hosp Pharm 1990;47:533-43.
2. Cipolle RJ, et al. Pharmaceutical Care Practice 1998.
3. van Mil FJW, et al. Int J Pharm Pract 2001;9(3):163-8
4. Roberts AS et al. Int J Pharm Pract 2006; 14(2): 105-113
5. Roberts AS et al. Int J Pharm Pract 2006; 14(3): 163-70

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A Conceptual Approach to Pharmacy Practice Research

INDUSTRY LEVEL

ORGANISATIONAL LEVEL

SERVICE PROVISION IN PHAMACY

CLINICAL ISSUES

Barriers and Facilitators of Change

- Barriers
  - Pharmacist-related
    - Attitude e.g. fear of change, lack of self-confidence
    - Practice skills e.g. limited communication skills
  - Resource-related
    - E.g. lack of management and incentives, lack of protocols and guidelines
  - System-related
    - E.g. limited acceptance by other health professionals
  - Academic and education related
    - Knowledge and training
  - Other
    - Lack of mentors and models, lack of vision

- Facilitators
  - Experiential
    - Remuneration
    - Pharmacist competence
    - Use of protocols
    - Interaction with patient groups
    - Profile within local community
    - Atmosphere of pharmacy
    - Motivation
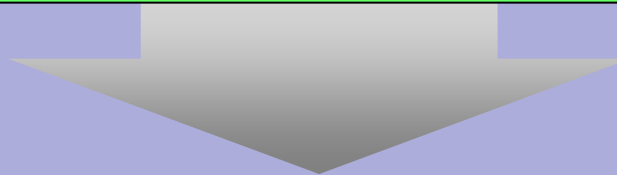 - Potential
    - Advertising
    - Proven benefits of service
    - Working as a team
    - Documentation system
    - Communication skills
    - Professional reward
    - Autonomy

Roberts AS et al. Int J Pharm Pract 2006; 14(3): 163-70

Research aims

MAIN RESEARCH AIM

To undertake research addressing issues related to implementation and dissemination of patient orientated health care services in community pharmacy.

Collaborative International Research

Roberts AS et al Int J Pharm Pract 2006;14(3):163-170
Roberts AS et al Int J Pharm Pract 2006;14(2):105-113
Hopp et al Int J Pharm Pract 2006;14(3):37-49
Hopp et al Int J Pharm Pract 2005;13(1):21-32

Gastelurrutia, M. A et al Seguimiento Farmacoterapéutico 2005; 3(2): 65-77.
Roberts AS et al Pharm World Sci 2003;25(5):227-34
Paulino E et al (unpublished)

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2001 | **2002** | **2003** | **2004** | **2005**

Development of qualitative research instrument.

Australian researcher in Denmark.

Qualitative studies completed in Denmark and Australia.

Danish researchers in Australia.

Publication of qualitative research instrument.

Qualitative study completed in Spain.

Quantitative study in Australia.

Keynote presentation at FIP congress.

Spanish and Portuguese researchers in Australia.

Qualitative study in Portugal.

"Change Management and Community Pharmacy" research in Australia

Publication of research results from Australia, Spain and Denmark
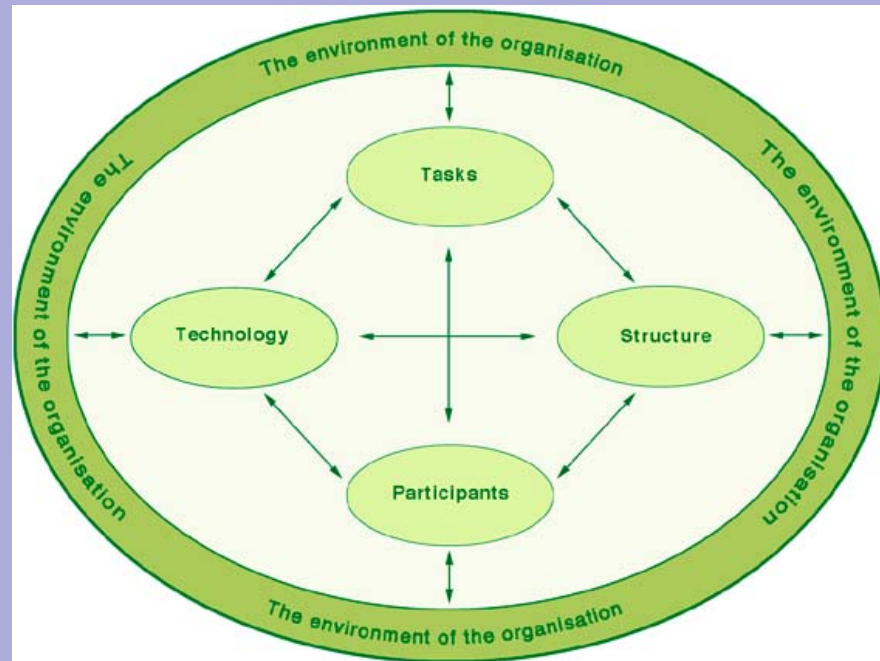
2006 AND BEYOND

Research commenced in Spain on quality systems in community pharmacy
Research commenced in Australia on business viability in community pharmacy

Theoretical framework: Organisational theory[1]

- Values[2]
- Innovation adoption[3]
- Change strategies[4]

1. Leavitt, H. J. (1964). In: New Perspectives in Organzational Research. Wiley: 55-71. 2. Porter, E. H. (1976). Group Org Studies 1(13): 302-9.
3. Rogers, E. M. (1995). Diffusion of Innovations. New York, The Free Press. 4. Borum, F. (1995). Strategies for Organisational Change.

Change management in Australia

'01 — "Development of a research instrument to identify factors affecting practice change in community pharmacy." [Honours thesis]

'03 — "An investigation into business and professional facilitators for change for the pharmacy profession in light of the Third Guild/Government Agreement." [Report]

'04 — "Quantification of facilitators to accelerate uptake of cognitive pharmaceutical services (CPS) in community pharmacy." [Report]

'05 — "Practice change in community Pharmacy: the implementation of cognitive services." [PhD Thesis]

'05 — "The Shape of Our Future: Change Management and Community Pharmacy." [Report]

Policy uptake: incorporated into all professional programs and services in the 4th Community Pharmacy Agreement (2005-10)

A Conceptual Approach to Pharmacy Practice Research

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CLINICAL ISSUES

The University of Sydney

"Practice Change in Community Pharmacy: the Implementation of Cognitive Services

Alison S. Roberts
Doctoral Thesis 2005

			Analysis
Qualitative Study			...c analysis ...vivo software for data management
		pharmacy assistants	

Quantitative Study	• To quantify facilitators and values
	• To identify pharmacies' adopter categories
	• To investigate relationships between:
	  – facilitators & individual characteristics
	  – values & individual characteristics
	  – adopter category & pharmacy characteristics
	  – adopter category & facilitators and values
		735 pharmacies, 1303 individual respondents	• Facilitators' and values' scales: Factor analysis
			• Adopter characteristics: Descriptive statistics

Null hypotheses

- That there are no significant correlations between the facilitator scores of the respondents and their values scores

- That there are no significant differences in facilitator scores or values scores between:
    - the age categories of respondents
    - the roles of respondents
    - the accreditation status of pharmacists

- That there are no significant differences between adopter categories according to:
    - the number of full-time equivalent pharmacists
    - the number of full-time equivalent pharmacy assistants
    - annual financial turnover
    - pharmacy location
    - facilitator scores of respondents
    - values scores of respondents

Results: Facilitators

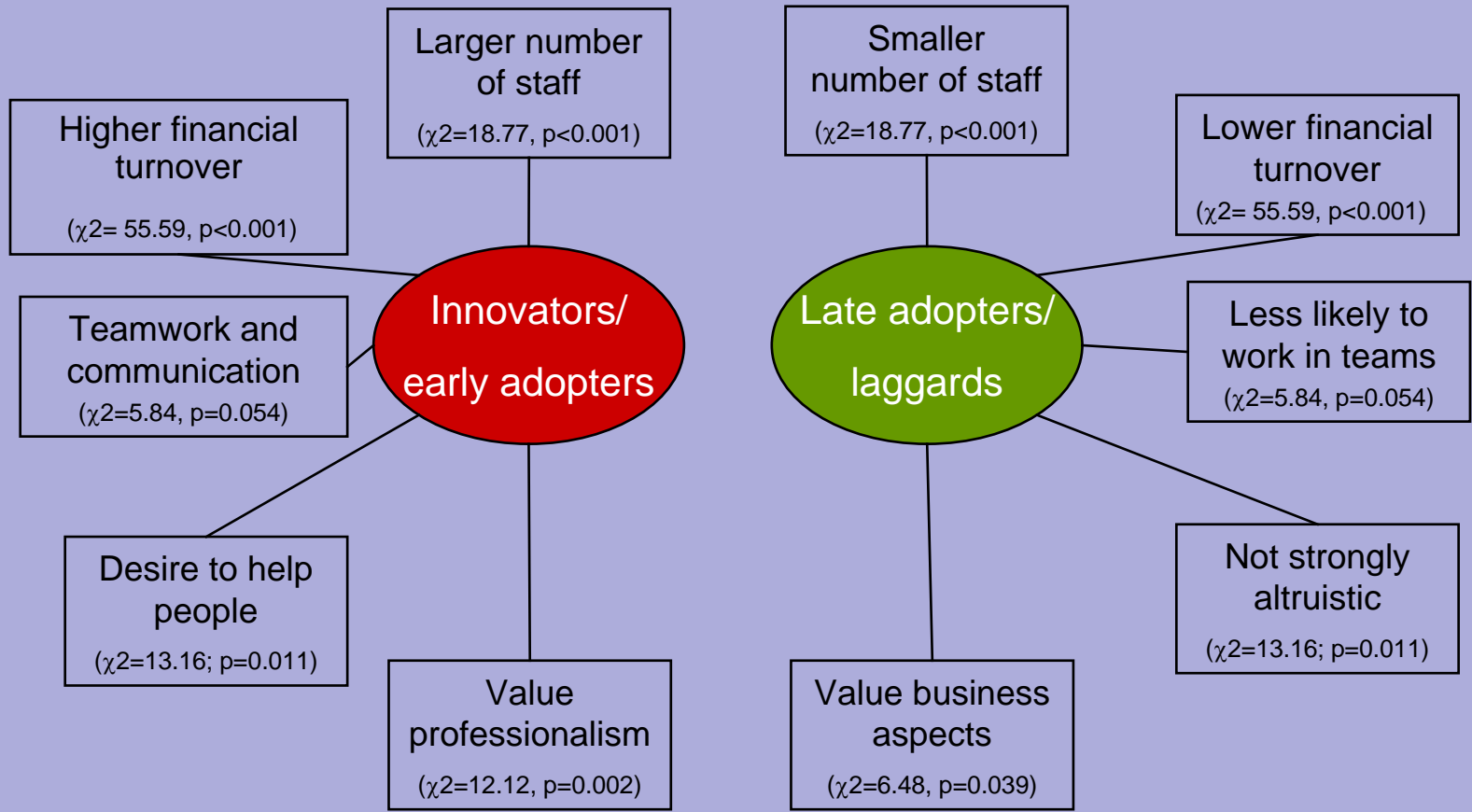| Factor	Facilitators	n	No. of items	Item loading range	Cronbach's α	% variance explained	Factor scale range	Factor scale mid-point	Median factor score
1	Relationship with doctors	1274	5	0.59-0.85	0.9	20.17	0.75-3.76	2.23	3.01
2	Remuneration	1261	6	0.52-0.74	0.82	8.46	0.64-3.22	1.93	2.47
3	Pharmacy layout	1260	5	0.52-0.79	0.81	6.16	0.64-3.19	1.92	2.45
4	Patient expectation	1280	4	0.52-0.85	0.82	4.38	0.71-3.53	2.12	2.25
5	Manpower/staff	1273	5	0.49-0.66	0.8	3.93	0.97-3.04	2.01	2.43
6	Communication/ teamwork	1280	6	0.37-0.65	0.77	3.13	1.59-2.65	2.12	2.2
7	External support and assistance	1274	4	0.47-0.69	0.74	2.55	0.73-2.98	1.86	2.39

Total Variance: 48.8%

Results: Values

Factor	Values	n	No. of items	Item loading range	Cronbach's α	% variance explained	Factor scale range	Factor scale mid-point	Median factor score
1	Professionalism	1280	3	0.70-0.82	0.82	30.16	0.77-3.87	2.32	3.09
2	Altruism	1278	4	0.44-0.77	0.76	14.68	0.99-3.33	2.16	2.77
3	Business and job satisfaction	1276	3	0.60-0.87	0.78	8.89	0.74-3.71	2.23	2.56

Total Variance: 53.7%

Results: Adopter characteristics

Innovators/ early adopters

- Higher financial turnover ($\chi2 = 55.59$, p<0.001)
- Larger number of staff ($\chi2=18.77$, p<0.001)
- Teamwork and communication ($\chi2=5.84$, p=0.054)
- Desire to help people ($\chi2=13.16$; p=0.011)
- Value professionalism ($\chi2=12.12$, p=0.002)

Late adopters/ laggards

- Smaller number of staff ($\chi2=18.77$, p<0.001)
- Lower financial turnover ($\chi2= 55.59$, p<0.001)
- Less likely to work in teams ($\chi2=5.84$, p=0.054)
- Not strongly altruistic ($\chi2=13.16$; p=0.011)
- Value business aspects ($\chi2=6.48$, p=0.039)

Hypotheses

- That there are no significant correlations between the facilitator scores of the respondents and their values scores REJECTED

- That there are no significant differences in facilitator scores or values scores between:
  - the age categories of respondents REJECTED
  - the roles of respondents REJECTED
  - the accreditation status of pharmacists REJECTED

- That there are no significant differences between adopter categories according to:
  - the number of full-time equivalent pharmacists REJECTED
  - the number of full-time equivalent pharmacy assistants REJECTED
  - annual financial turnover REJECTED
  - pharmacy location NOT REJECTED
  - facilitator scores of respondents REJECTED
  - values scores of respondents REJECTED

The Shape of our Future:
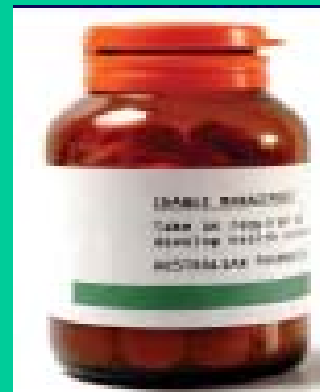## Change Management & Community Pharmacy Project

Dis Prof D.Dunphy[1]

Prof I.Palmer[1]

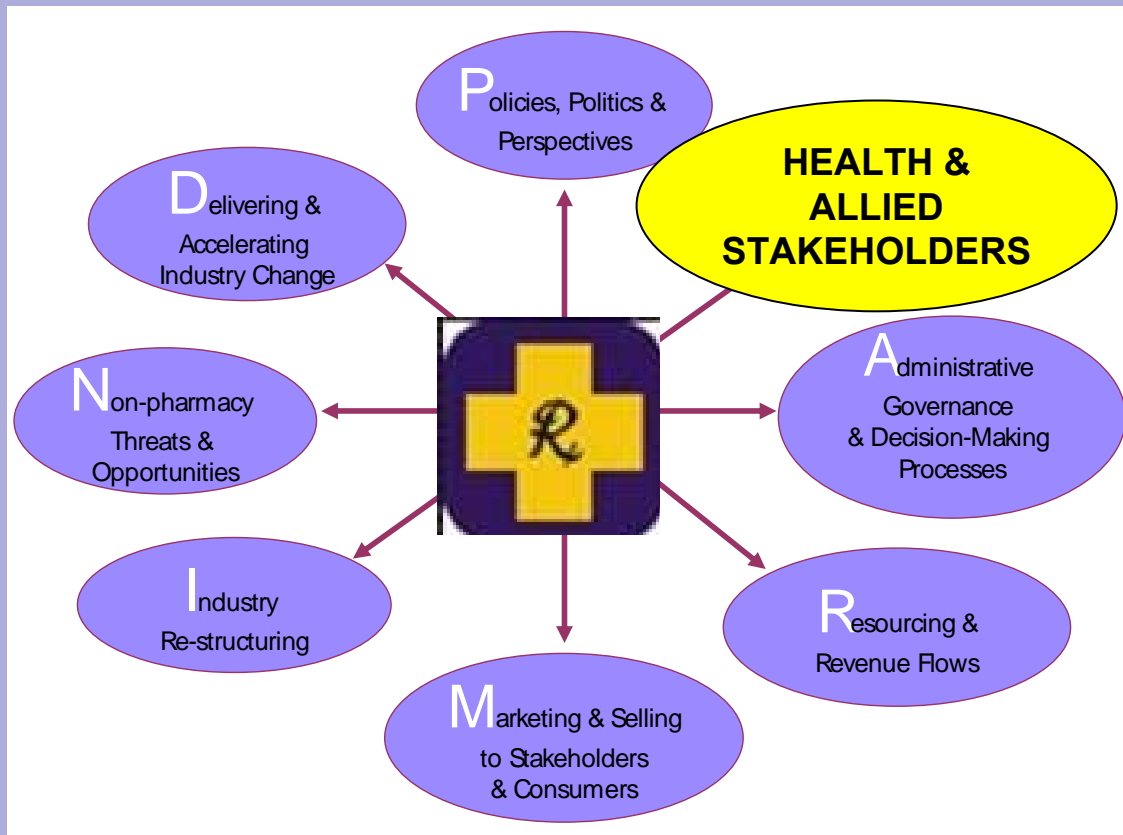Prof M.Frommer[2]

Dr Alison Roberts[2]

Prof S. Benrimoj[2]

[1] The University of Technology, Sydney
[2] The University of Sydney

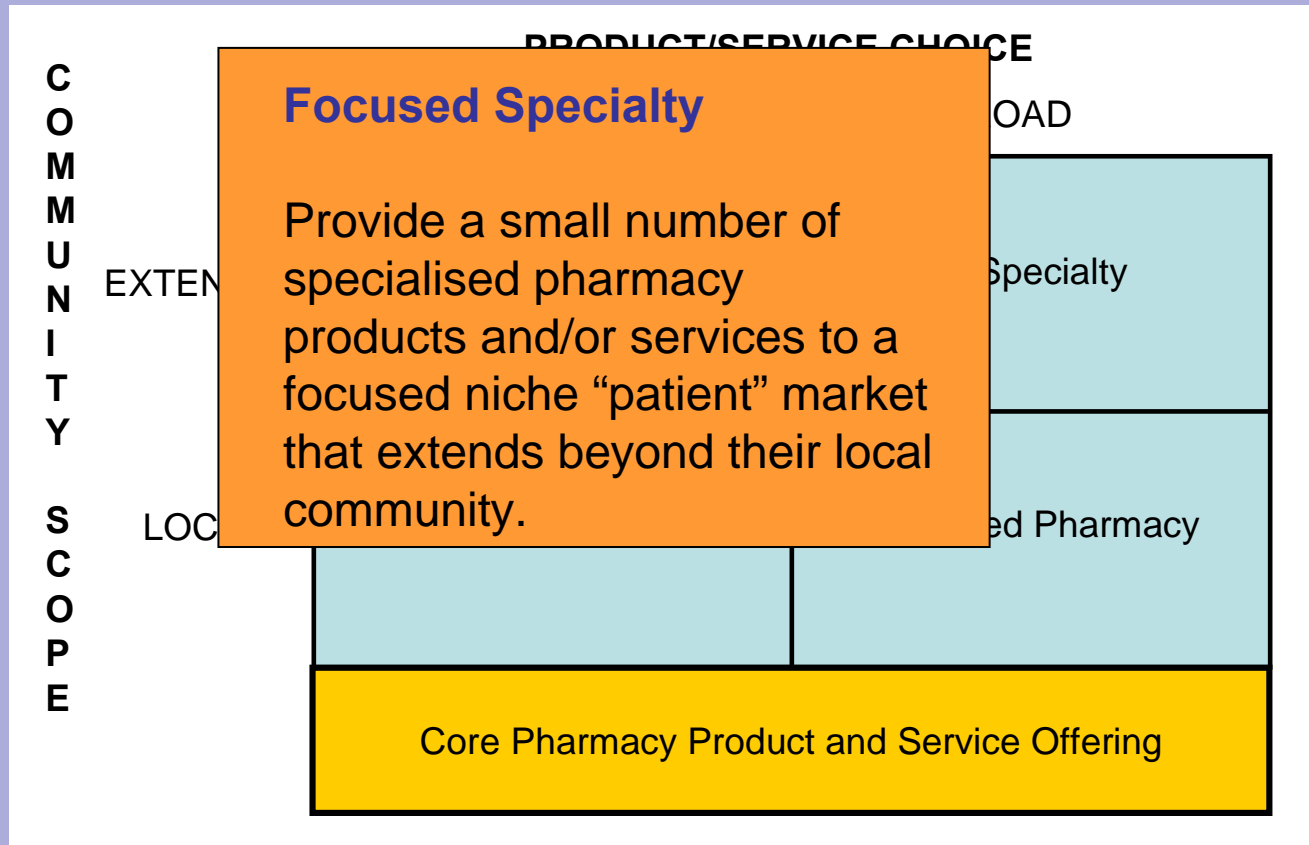http://beta.guild.org.au/research/project_display.asp?id=273

PHARMIND WHEEL

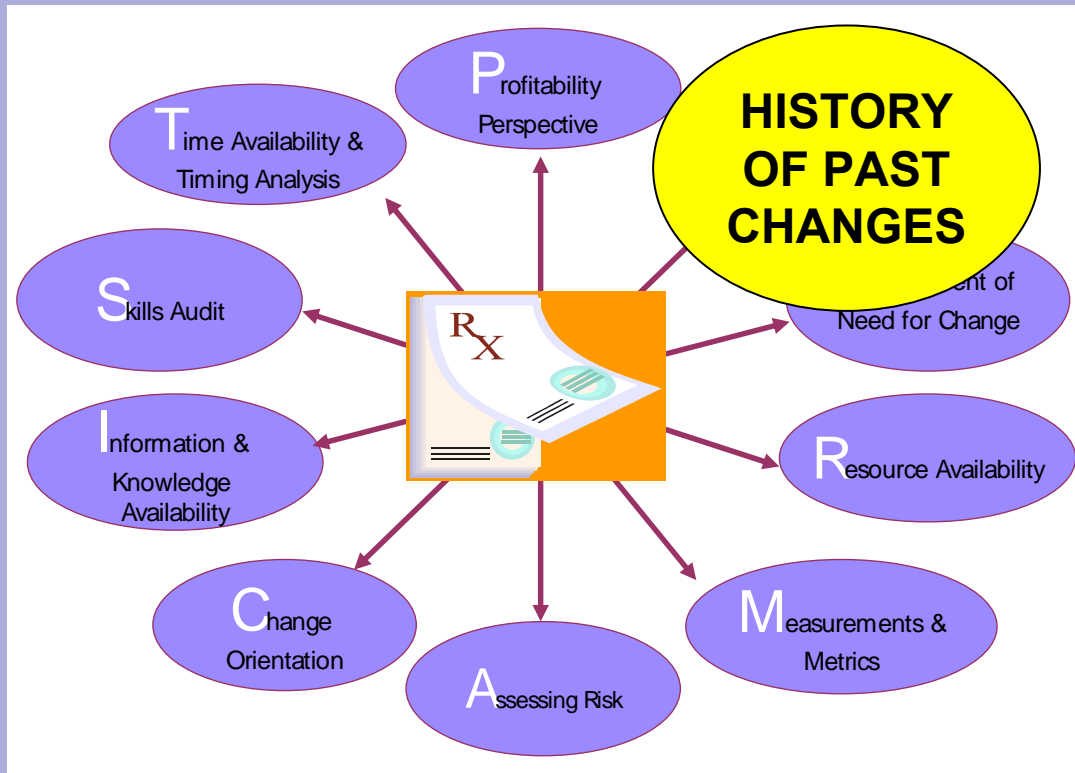**Policies, Politics & Perspectives**

HEALTH & ALLIED STAKEHOLDERS

Delivering & Accelerating Industry Change

Administrative Governance & Decision-Making Processes

Non-pharmacy Threats & Opportunities

Industry Re-structuring

Resourcing & Revenue Flows

Marketing & Selling to Stakeholders & Consumers

Pharmacy Viability Matrix

Pharmacist Change Readiness Wheel

Pharmacist Change Implementation Wheel

- **P**lanning the Change
- **H**elping and Assisting the Change
- **A**llocating Resources for the Change
- **R**esponding to & Managing Resistance to the Change
- **M**arketing the Change
- **A**ligning the Change
- **I**ntegrating & Consolidating
- **S**ituating & Leading the Change
- **T**riggering the Motivation to Change

COMMUNICATING THE VISION AND CHANGE
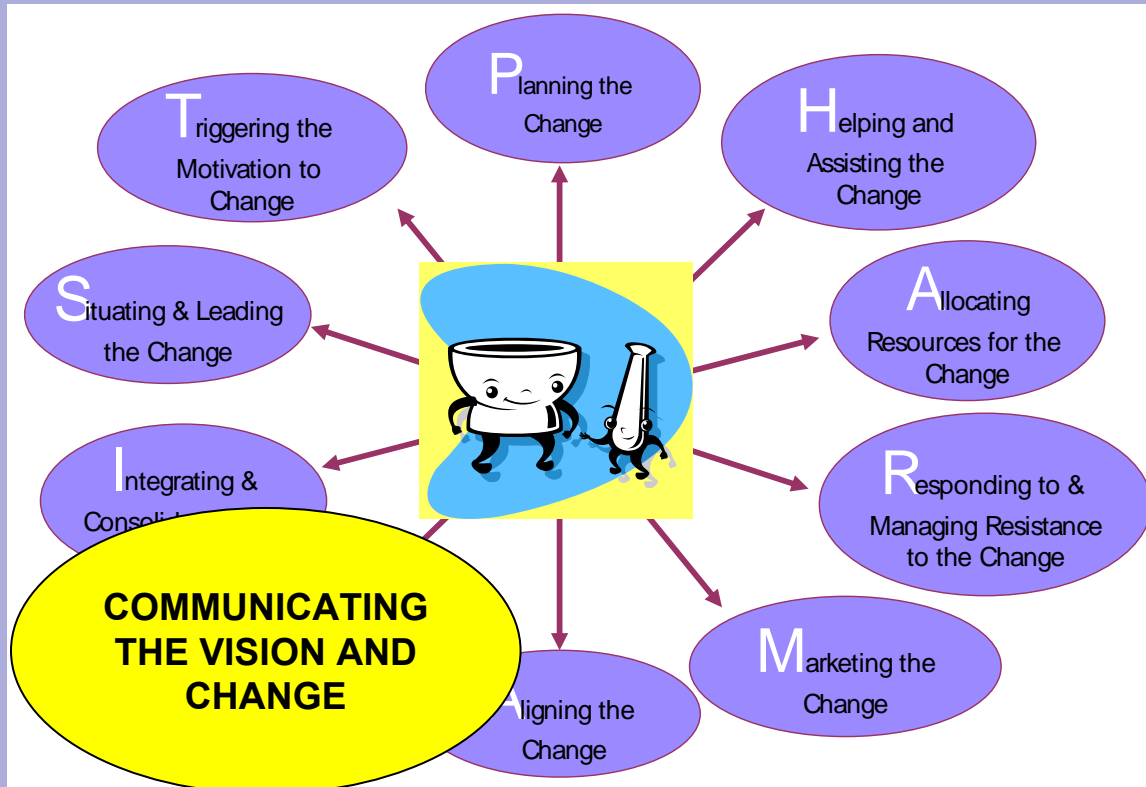
References: This wheel builds on and integrates material drawn from:

Kotter, John (1996) *Leading Change* Boston: Mass.; Harvard Business School Press

Kanter, R.M, Stein, B.A & Jick, T.D. (1992) *The Challenge of Organization Change: How Companies Experience it and Leaders Guide it* New York: Free Press

Nadler, D.A. (1998) *Champions of Change: How CEOs and their companies are mastering the skills of radical change* San Francisco: Jossey-Bass

Pendlebry, J, Grouard, B. and Meston, F. (1998) *The Ten Keys to Successful Change Management* England: John Wiley and Sons Ltd

Conclusion

- Current research is on the first two levels

- A widespread and integrated approach to research is necessary: inclusion of business and professional aspects

- Future research into quality systems and business viability to provide the infrastructure for optimal and sustainable implementation

Industry

Organisational

Service Provision

Clinical