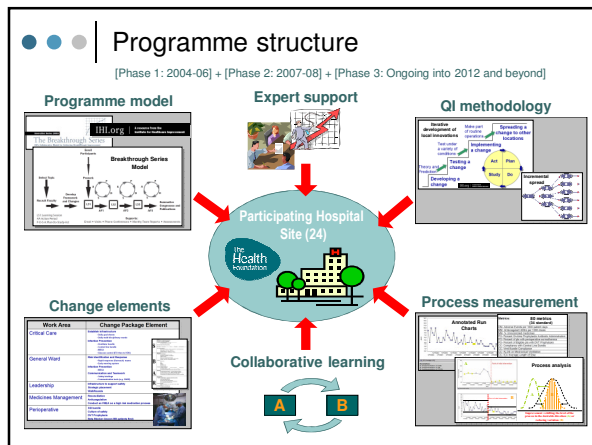


The Safer Patients Initiative

Understanding the impact of a large-scale care systems improvement programme

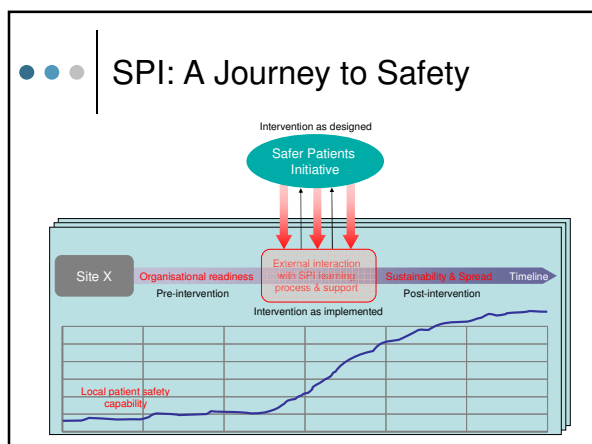
Jonathan Benn; Susan Burnett; Anam Parand; Anna Pinto; Sandra Iskander; Charles Vincent

Centre for Patient Safety and Service Quality
Imperial College London



The evidence base for collaborative programmes

- **Evaluation of quality improvement programmes (Ovretveit & Gustafson, 2002):**
 - Little research evidence exists regarding the effectiveness of complex, changing, social interventions that target organisations
- **Systematic review of evidence for the impact of quality improvement collaboratives (Schouten et al. 2008)**
 - Review of 9 robust studies showed mixed/limited positive results
 - Heterogeneity of interventions at this level limits our ability to conclude they have an effect
 - Inability to separate "intervention" from continuous internal development/processes
 - Studies generally do not capture what happens in the "black box"



Research questions

- What constitutes "capability" for continuous improvement and how do we measure it?
- How does experience of large-scale programmes vary across organisations and contexts?
- What are the implications for effective programme design?
- What are the implications for research practice?

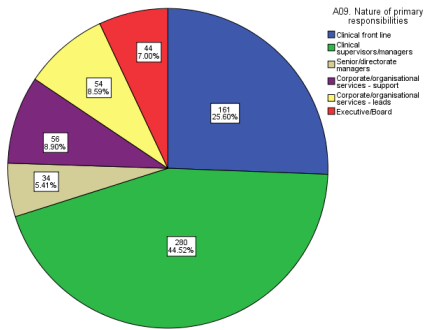
Multi-method research design

- **Review of run chart measures:**
 - Data from 80 programme metrics reported monthly by sites
- **Survey of local project teams:**
 - 80 items covering: readiness, impact, safety climate & capability
 - Sampling strategy: chief executives, senior managers, SPI coordinators, clinical improvement leads and frontline implementers
 - Administered during and after SPI main phase (2008 & 2009 in 20 sites (t1 = 631 responses; t2 = 284 (55% attrition rate)
- **Site visits, qualitative interviews and case studies:**
 - 24 initial site visits with follow up interviews, over 200 interviews and several case studies of improvement work in specific clinical micro-systems

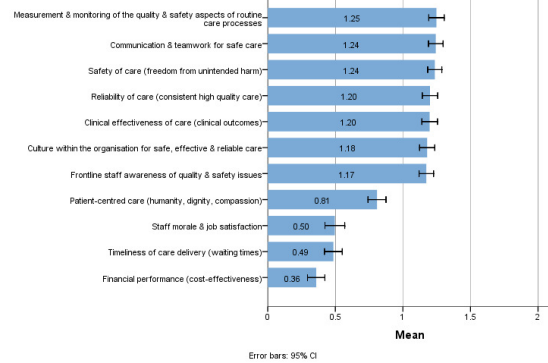
Qualitative perspectives on the impact of SPI

Cultural change	"But I think the cultural changes in the long run are probably more important than system changes...because I think that if you don't change the culture, then the other things won't be sustainable." (Senior clinical manager)
Organisational strategy/leadership	"There is a perception, in this organisation, as in any other organisation, that the focus of the executives and the board is on finance and performance. This was different. This was coming along and saying, "we are interested in quality..." (Senior manager)
Multidisciplinary working	"...there's also a lot of bridging between clinical groups, teams now... and I don't think that kind of thing was happening before..." (Senior clinician)
Capability for QI	"...it's not just about the patient safety programme, it's about redesign, it's about other quality improvement...and applying the same methodology...we learned this from SPI, we're going to use it for a lot of other things..." (Patient safety coordinator)

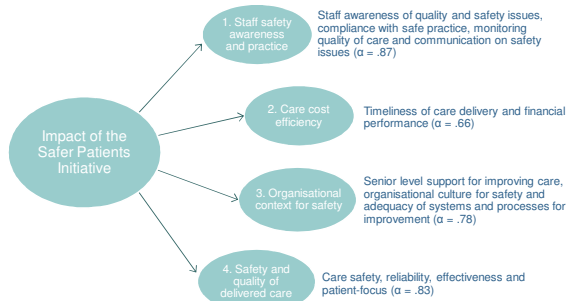
Survey sample composition: 1st time-point



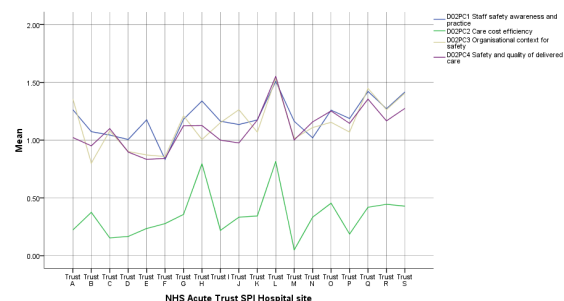
Ratings of impact dimensions



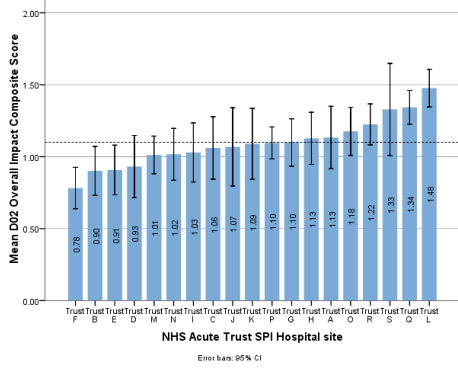
Principal components of "Impact"



Variation across organisational contexts



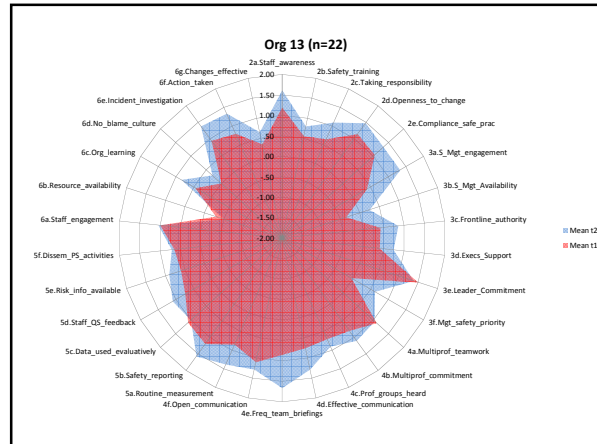
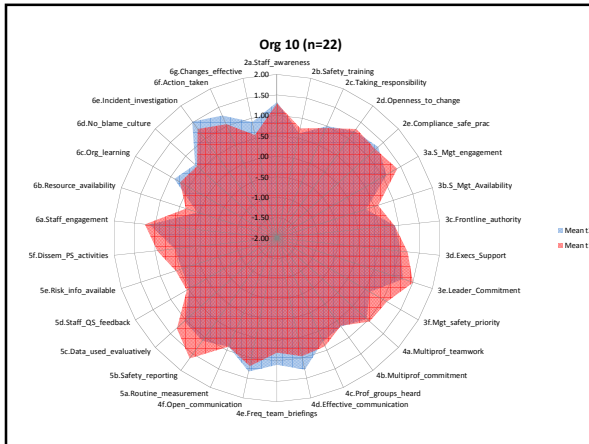
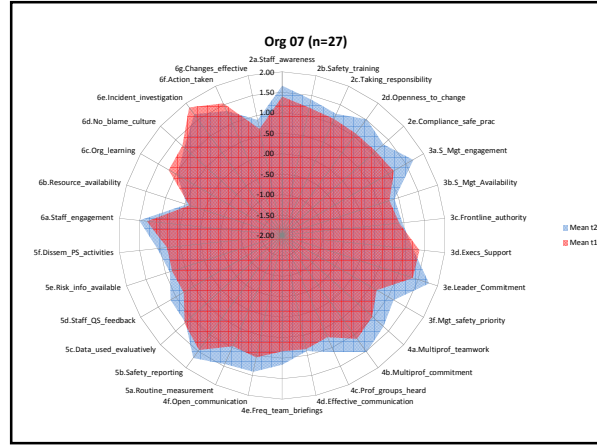
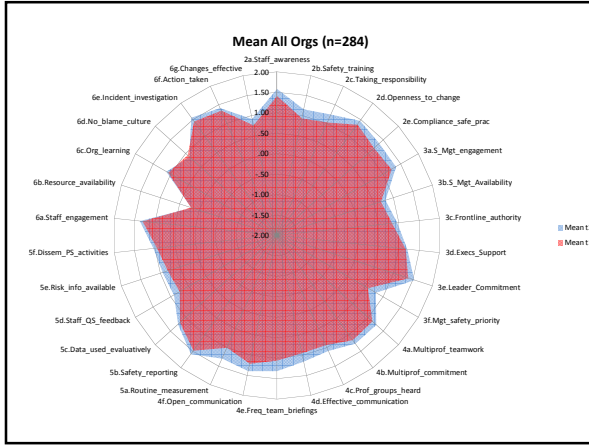
● ● ● Aggregated scores by organisation

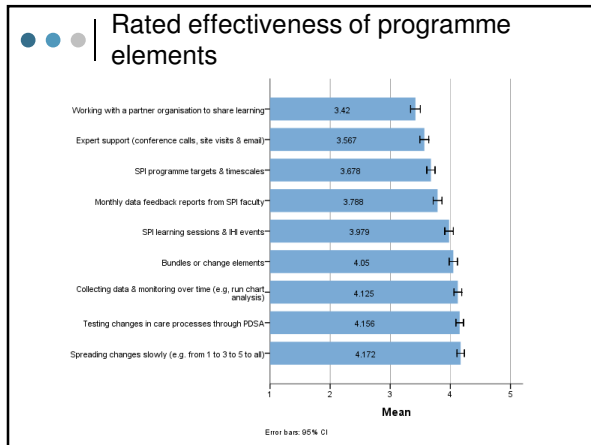
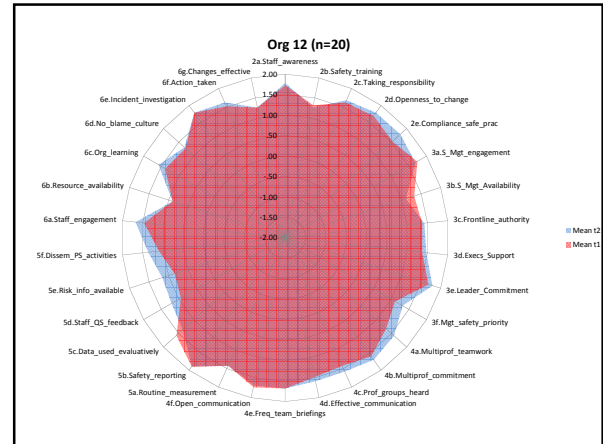
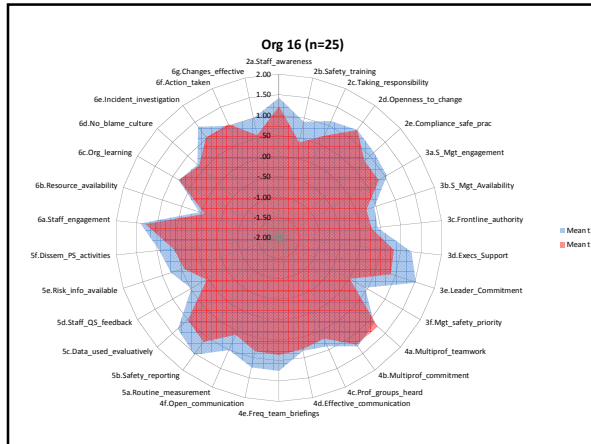


● ● ● Longitudinal measurement of local safety climate and capability: Organisational profiles

Five dimensions (30 items measured at 2 time points: t1 mid-2008; t2 mid-2009)

1. Monitoring and feedback
2. Senior level support and leadership
3. Multi-professional collaboration
4. Organisational action and learning
5. Staff commitment and cognisance





Qualitative perspectives on the value of measurement

Understanding cause and effect	"...if you start to measure then you start to see cause and effect more and one of the problems in healthcare is, it's very difficult to see cause and effect...So the measurement is absolutely fundamental and I think that's as big a cultural change as any." (Senior clinical manager)
Local ownership of data for improvement	"...I know at the senior charge nurse meetings, they all use the data now to discuss the improvement work, which before, there was no data really, or it was data that was given to them, it wasn't their own data and I think that's what makes the difference, it's their own data..." (SPI Coordinator)
Making current reliability visible	"What was new was the measurement...We were already using care bundles...what we weren't doing was measuring how effectively we did it, we were just doing it and it wasn't till we started measuring it that we realised we weren't doing it as effectively as we thought." (Senior clinical manager)

- Lessons from research in the Safer Patients Initiative**
1. Measurement & feedback systems are important to guide improvement work, quantify achievement and engage staff
 2. Train staff to use practical improvement techniques (Spread model; PDSA cycles; run-charts)
 3. Focus on system capability for continuous quality and safety improvement

- Research challenges for studying similar programmes**
- Large-scale (multiple contexts; multilevel)
 - Complex (in both programme design and systems impacted);
 - Longitudinal and adaptive;
 - Sociotechnical (cultural, motivational, clinical, organisational & methodological components);



Thank You!

Questions/Comments?