Appendix – potential sources of data

Data source	Subgroup	Advantages	Disadvantages
Routinely collected or mandated	Mandated quality and safety measures (eg methicillin-resistant *Staphylococcus aureus* (MRSA), 'never events', NHS Safety Thermometer, ward-quality scorecards)	Data readily available	Not comprehensive; present a limited number of very specific measures; often over rely on process measures
	Routinely collected operational data (eg readmissions, length of stay)	Data readily available	May lack clinical credibility, as they rely on accurate data input and coding
	Mortality data	Data usually readily available at hospital level	May lack clinical credibility, as they rely on accurate data input and coding; presentation and interpretation can be oversimplified
	Clinical incidents; 'never events'	Common themes can be collated to inform quality improvement	Clinicians rarely have prompt access to data; incidents may be analysed individually rather than thematically; numbers or rates may not be meaningful
Clinically generated	National clinical audits and databases	High level of clinical credibility; more accurate and comprehensive than many other sources	Are usually condition specific; do not cover the whole range of clinical practice; data collection is resource intensive
	Local clinical audits and specific data collection	May be helpful for addressing specific issues	Labour intensive; risk of duplication; may give only a selective picture; may lack rigorous design
	Individual clinician outcome data	May be useful for procedure-based specialities	Lacking for most medical specialties; unlikely to capture the complexities of team care

Patient derived	National inpatient survey	Data readily available	Useful at hospital level but usually not at ward or departmental level
	Local patient surveys	Can be used to address specific local issues	Time consuming; many lack rigorous design
	Compliments and complaints	Common themes can be collated to inform intervention and quality improvement	Clinicians rarely have prompt access to feedback; analysis may be individual rather than thematic
	Informal or narrative feedback	Readily available; may add to knowledge by incorporating 'patient stories'	Quantitative analysis is unhelpful; unlikely to be representative; anecdotal
	PROMs and PREMs	Potentially a more systematic view from the patients' perspectives; useful to correlate qualitative data from complaints and compliments	Not well developed for most conditions affecting acute medical patients; challenging to collect and achieve high response rates
Staff and colleagues	National staff survey	Data readily available	Useful at hospital and specialty level but not at ward or departmental level
	Local staff surveys	Can be used to address specific local issues	Time consuming; many lack rigorous design
	Staff sickness rates, absenteeism and staff turnover	Data readily available; may help to explain why quality is low	May be hard to effect change
	Staffing numbers and skillmix	Data readily available at hospital level	Relationship with other measures of quality not well understood
	Individual clinician multi-source feedback	Useful for individuals for personal development and appraisal or revalidation	Unlikely to help at a wider level
	GMC trainee survey	Data readily available; trainee reports may highlight quality issues that are not apparent from other sources	Helpful at trust level but less so at specialty or ward level
	Informal staff and colleague feedback	May highlight quality issues that are not apparent from other sources	Anecdotal; subject to individual interpretation
Other	Systematic case-note reviews and mortality reviews	Can be a powerful source of learning	Risk of being seen as punitive; time consuming