SETTING NATIONAL TARGETS TO IMPROVE OCCUPATIONAL HEALTH

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Abstract. This paper describes a national strategy to improve occupational health and a longitudinal view of a 15 year project undertaken in the UK, logging the key developments. The first results should become apparent in 2005. Progress will be reported.

Key words: Occupational health, Targets, National strategy

BACKGROUND

Two important strategic documents were published in the UK by the Department of the Environment and the Health and Safety Commission in 2000.

“Revitalising Health and Safety” [1] was presented as a consultative document in July 1999 by the Health and Safety Commission and the Department of the Environment, and issued with a foreword by the Secretary of State for the Environment, who was also the Deputy Prime Minister. It represented a review of Occupational Health and Safety in Great Britain and sought to identify new approaches to improving the record, ensuring that policies were relevant to the changing world of work and establishing links between Health and Safety and other Government programs.

The second, “Securing Health Together” [2] was put forward by the Health and Safety Commission and Health and Safety Executive as a strategy for improving the country’s occupational health. The consultative document was issued in 1998.

The two documents were crucially developed:

- with the widest possible consultation - a process which lasted months;
- with a commitment from a number of relevant Government departments – Environment, Health, Social Security, Employment, Education, Transport and the Regions (Scotland and Wales) – an example of “joined-up government”;
- with, for the first time, quantifiable targets set to be achieved over the following 10 years for accidents, work-related ill-health, time lost from work, rehabilitation and work opportunity.

A further document on improving access to occupational health support [3] was produced at the request of ministers by the Government’s Occupational Health Advisory Committee stimulated by the Health and Safety Commission and the Department of Health. The term “occupational health support” was chosen in preference to the more usual “occupational health services” to emphasise the fact that support to the workforce is unlikely in the future to take the form of “traditional” occupational health services. The nature of support will vary...
according to needs – especially those of small and medium-sized enterprises (SMEs) – and is likely to be provided in a number of different ways by a variety of individuals and organisations. The document’s focus is on occupational health although many of the suggestions made could equally well be applied to occupational safety.

The three documents can be seen to follow one another chronologically and espouse a holistic approach to occupational health covering:
- the effects of work on health, incorporating prevention;
- the effects of health on work, addressing the fitness of both workers and tasks;
- rehabilitation and recovery programs;
- helping the disabled to secure and retain work;
- managing work related aspects of illnesses which have multi-factorial causes (stress and musculoskeletal disorders for example).

MEASURES OF EFFECTIVENESS

Measuring the effectiveness of occupational health services at a national level is complex, distinguishing as it must between the contributions made by the occupational health service sector and that made by all the other kinds of effort being brought to bear on the unacceptably high incidence of work-related diseases. As with any health problem the contribution of “services” (however widely defined) to the eventual outcome, may be limited. Outcome measurement is notoriously tricky and that of occupational ill-health presents particular difficulties of:
- definition – as some conditions (work-related upper limb disorders for example) are difficult to specify diagnostically and an agreed, reliable time series becomes unviable;
- latency – cause and effect are often widely separated in time making attribution and political action difficult;
- multiple sources of risk - the well-known effect of non-work activities and environment;
- labor force mobility and contractorization – difficulties in ascribing causes and exposures;
- the changing world of work;
- the unsatisfactory nature of ill-health data sources.

For many of these reasons some have argued for the collection of “upstream” data such as exposures, quantifiable risks, and bio-markers rather than “downstream” effects – work-related diseases. In practice, although plenty of upstream data is collected and analysed, diseases or conditions, perhaps better defined than they are at present, will remain the measurables by which most commentators will judge overall effectiveness.

AVAILABLE DATA SOURCES

Faced with the politically generated task of improving occupational health and proving that it has improved requires baseline data. A high quality and extensive body of such data on occupational ill-health is something of which few countries can boast.

What the UK possessed was a hotchpotch of incompatible data collected for different reasons, employing different definitions over different time-scales and by different agencies. This was the data available at the beginning of the millennium:
- RIDDOR – Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (Statutory). Reporting is by employers to HSE – Health and Safety Executive for the purposes of collecting national statistics;
- IIS – Industrial Injuries/Diseases Scheme (Statutory). Reporting is by individuals to the Department of Work and Pensions for purposes of worker compensation;
- ODIN – Occupational Disease Intelligence Network – voluntary reporting by specialist doctors;
- SWI – Self-Reported Work-Related Illness surveys - occasional surveys by HSE;
- ionising radiation exposure data-routine collection;
- blood-lead data;
- other population based surveys;
- death data;
- general practice sources.

Each of these schemes is like a piece in a jigsaw puzzle – pieces that do not fit together neatly, pieces with different colors and patterns on them and of different thicknesses. Moreover many of the pieces are missing.
The schemes can be compared in their detail according to the following elements:
- nature – general administrative verses purpose designed
- length of series/discontinuities
- scope – fixed or open
- incidence or prevalence data
- absolute counts or estimates
- degree of undercounting
- source of data/diagnostic quality
- range of analyses
- controller
- timeliness
- trend analysis: fitness for purpose.

**MEASURING PROGRESS**
Whatever the imperfections and inconsistencies in the present way of collecting occupational health data, the strategies for improving occupational health demanded progress and the ability to measure and monitor that progress. Whatever the statistics showed, with all their imperfections, they were going to have to monitor trend and their fitness for such purpose would depend on their:
- precision
- stability
- comprehensiveness
- reliability of attribution
- timeliness.

The main disease reporting systems were assessed as to their usefulness for monitoring trend:

<table>
<thead>
<tr>
<th>RIDDOR</th>
<th>II SCHEME</th>
<th>ODIN</th>
<th>SWI</th>
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<tbody>
<tr>
<td>Precision</td>
<td>(Absolute numbers)</td>
<td>(Absolute number)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Stability</td>
<td>Good</td>
<td>Fair in past – future uncertain</td>
<td>Fair</td>
</tr>
<tr>
<td>Comprehensiveness</td>
<td>Limited</td>
<td>Limited</td>
<td>Moderate</td>
</tr>
<tr>
<td>Attribution to work</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
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<tr>
<td>Control</td>
<td>Good</td>
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**TARGETS**
 Targets can be symbolic – “health for all by the year 2000”; practical – “reduce average blood lead levels by 10% by the year 2005” or a hybrid category called “aspirational”.

These are set with the hope that they can be achieved, in the knowledge that they may not be, but with the aim of stimulating activity.

The following targets are practical ones which have, in general, to be:
- amenable to action by those responsible for achieving them;
- relevant to strategic objectives;
- realistically based on available data;
- capable of being monitored with sufficient statistical robustness;
- feasible in the time-scale set;
- amenable to reconsideration and revision as the policy environment changes;
- reflective of the underlying objective rather than chosen because it is known they can be achieved.

The targets in “Revitalising Health and Safety” [1] are:
- to reduce the number of working days lost per 100 000 workers from work-related injury and ill-health by 30% by 2010;
- to reduce the incidence rate of fatal and major injury accidents by 10% by 2010;
- to reduce the incidence rate of cases of work-related ill-health by 20% by 2010;
- to achieve half the improvement under each target by 2004.

The targets in “Securing Health Together” [2] are:
- a 20% reduction in the incidence of work-related ill-health by 2010;
that everyone currently in employment but off work due to ill-health or disability, where necessary and appropriate, is made aware of opportunities for rehabilitation to be back into work as early as possible;

that everyone currently not in employment due to ill-health or disability is, where necessary and appropriate, made aware of and offered opportunities to prepare for and to find work.

TARGET SETTING

Setting the targets was a painful process which inevitably attracted criticism and continues to do so [4,5]. They are some of many thousands of targets which the UK government has set in many areas of life. Are they too ambitious? Not ambitious enough? How are they going to be measured? Without going into the detail of exactly how the targets were agreed upon – a story in itself – what occurred was a polarisation between the academically inclined who said: “without a baseline we cannot begin to measure trend”, and those of a pragmatic bent who said, – and this was a stance agreed to by the UK Treasury – “It is not necessary to have very robust baseline data in order to establish practical targets as long as there is confidence in the direction of travel and wide agreement on the methodology to be used, its transparency and relevance”.

In essence, it was recognised that:

- progress measurement would involve more than one data source;
- the focus would be on measuring change rather than estimates of absolute levels;
- statistical modeling techniques would have to be used to limit the impact of sampling variability;
- supplementary data would have to be collected on economic, social and cultural factors;
- quality assurance would need to be provided - this data set would be part of National Statistics;
- progress reporting would have to be on a yearly basis.

NEXT STEPS

Moving forwards

Five “Programme Action Groups” have been established, overseen by a high level Partnership Board, covering: Compliance, Continuous improvement, Knowledge, Skills and Support (Services).

To understand how this schema might apply in practice, take the example of occupational asthma, the incidence of which (approximately 1500–3000 new cases per year) has remained broadly constant in the UK over the last 10 years [6,7]. A 20% reduction by 2010 means 300–600 prevented cases per year by that time. How may this be achieved?

- Compliance (with the law) – identify and target the substances and occupations with the highest rates, increase enforcement and bring in an explicit code of practice.
- Continuous improvement – better supply chain management.
- Knowledge – improve on the surveillance and statutory reporting schemes mentioned above. Track the development of occupational asthma in individual sufferers; how and why did it develop?
- Skills – improve awareness and diagnosis especially amongst professionals such as practice nurses, general practitioners and specialists.
- Support – action to improve the penetration of occupational health support services, public information through the media, telephone and internet help-lines.

This approach is to be adopted in a systematic and prioritized way to other occupational conditions such as back pain, upper limb disorders, work-related stress etc.

Moving in the right direction

During this process of thinking about improving occupational health, about the future and how the targets were going to be achieved, those concerned realized that Government and Industry (employers and Trades Unions) were locked into a view of occupational health which is outmoded. The paradigm shift needed to be from “protecting workers by reducing risks” to “achieving outcomes
by every available means” – management of occupational health improvement by objectives in other words.

To achieve these targets, priorities were going to need to be changed and resources shifted – a large and radical task. Without compromising the attention which still needs properly to be given to the effects of toxic chemicals and pesticides (asbestos in particular) analysis of the relative risks to occupational health of the various agents has moved the emphasis towards more contemporary issues such as:

■ musculoskeletal disorders and stress
■ absence from work attributable to sickness
■ employability/workability
■ rehabilitation.

To effect a change from the old to the new is not a job that can be done by a labor inspectorate, by occupational physicians nor by occupational health services. It requires commitment across the whole of Government (a commitment which has already been given in the UK), a commitment by Industry and the Trades Unions, and a commitment by individuals to give more priority to occupational health in their everyday working lives.

To reduce morbidity and improve performance in these difficult-to-grasp areas may well require legislative change and will certainly demand a multi-disciplinary approach and a change in culture.

REFERENCES

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