‘Shaping the Future of Laboratory Medicine: The Great Debate’

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Central Role of Laboratory Medicine

Up to 70% of clinical decisions are informed by data from Laboratory Medicine (source UK Department of Health)

<5% spend
Laboratory Medicine Review: In Every Country

Laboratory Medicine

- Quality
  - Analytical quality
  - Quality assurance
  - Accreditation

- Clinical Effectiveness
  - Clinical outcomes
  - Patient focus
  - Timeliness

- Cost Effectiveness
  - Total cost
  - Value for money
  - Appropriate use

Aging population
Chronic disease

Rising costs
Inadequate budgets

Medical tourism
Travel abroad for treatment

Payers influence decisions
The 'informed' patient

Philanthropy
Developing countries

Non-MDs providing care

Prevention
Wellness screening

Technological advance
Personalised medicine

Innovation and demand
Emerging countries

Evidence based medicine
Clinical practice guidelines

Environmental challenges
Water, air, food, congestion

Global pandemics

Adapted from Harvard Business Report http://hbr.org
Laboratory Medicine: Future Priorities

Continuous laboratory quality improvement

Development will be ‘outside’ as well as ‘inside’ the laboratory

Improvement in efficiency and cost effectiveness
‘Added Value’

Improvement in clinical outcomes
Drivers for Change in Laboratory Medicine

- Globalisation
- Adding Value to Improve Outcomes
- Technological Advance
- Integrated Diagnostics
- Smarter Working
Globalisation of Laboratory Medicine

Instant Global Communication

Quality Standards

Laboratory Practice

Clinical Applications

Meeting the requirements of:
Patients
Clinicians
Other Healthcare Interests
Technological Advance

- Proteomics
- Metabolomics
- Genomics
- Bioinformatics
- Nanotechnology and POCT
- Automation Robotics
- Mass Spectrometry

Impact on skills training and operational requirements
Smarter Working

Pressure on healthcare budgets

- Ageing Population
- Medical Advances
- Rising Workloads

- Improved Efficiency
- Workload Management
- Shared Resources

Impact on staffing levels and skill mix
Integrated Diagnostics

Laboratory Medicine

Imaging

Endoscopy

Integrated Patient Pathways

Informatics & Knowledge Management

Erosion of traditional boundaries of Laboratory Medicine
Adding Value Cycle to Quality Laboratory Medicine Services Through the Application of ‘SCIENCE’

- **E**ducation of Others
- **S**tandardisation/Harmonisation
- **C**ost Effectiveness
- **I**nnovation
- **N**ovel Applications
- **E**vidence-based Practice
- Clinical Effectiveness

**Quality Laboratory Medicine**
### ‘Divisions’ in Laboratory Medicine

<table>
<thead>
<tr>
<th>Staff Grades</th>
<th>Sub-Specialty</th>
<th>Delivery Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>National</td>
<td>International</td>
</tr>
<tr>
<td>Medical Doctor</td>
<td>Clinical Chemistry</td>
<td>Managed POCT</td>
</tr>
<tr>
<td>Clinical Scientist</td>
<td>Haematology</td>
<td>Private Laboratory</td>
</tr>
<tr>
<td>Biomedical Scientist</td>
<td>Immunology</td>
<td>Managed POCT</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>Microbiology/Virology</td>
<td>Unmanaged POCT</td>
</tr>
<tr>
<td>Technician</td>
<td>Genetics</td>
<td>‘Over the Counter’</td>
</tr>
<tr>
<td>Laboratory Assistant</td>
<td>Molecular Pathology</td>
<td>Via the Internet</td>
</tr>
<tr>
<td></td>
<td>Informatics</td>
<td></td>
</tr>
</tbody>
</table>

What do we call ourselves?

Good for patients?  Good for profession?

Good for patients?  Good for profession?
The ‘Inclusive’ Global Alternative

Patient

Clinical Team
Lab Medicine

Laboratory Team
Medical Doctor
Clinical Scientist
Biomedical Scientist
Pharmacist
Technician
Laboratory Assistant

Laboratory Medicine
Clinical Chemistry
Haematology
Immunology
Microbiology/Virology
Genetics
Molecular Pathology
Informatics

Delivery Mode
Public Laboratory
Private Laboratory
Managed POCT
Other

Quality standards and service specification
‘Shaping the Future of Laboratory Medicine’

A vision for the future

Arising from IFCC Strategic Plan

Launched May 2013 to all IFCC Members

One year consultation

Debate at IFCC Council June 2014
Shaping the Future of Laboratory Medicine

Aims of Consultation

1. To stimulate societies to consider solutions for their own country

2. To consider how IFCC may position itself for the future
Opportunities for IFCC

- Increased collaboration for Full & Corporate Members
- Improved range and quality of services for IFCC Members
- Increased credibility with global clinical organisations
- Increased focus on added value and clinical outcomes
- Increased influence with World Health Organisation
- More global standardisation & harmonisation
- More global practice standards & guidelines
- A more effective global voice for laboratory medicine
Opening Up the Membership of IFCC: Barrier

IFCC Statute 4.1.1
Full Members are drawn from either one established and recognised national society of clinical chemistry, or clinical chemistry and laboratory medicine, or one such organisation in a given geographical area

Limits IFCC to one Full Member per country. (Most IFCC Full Members originated as Clinical Chemistry Societies. They have embraced wider laboratory medicine to a variable extent).

Can only be changed by a vote of the IFCC Council i.e. Current Full Members
Survey of IFCC Full Members: Nov 2013

- 100% are active in clinical chemistry
- >70% are active in immunology and haematology
- >60% are active in microbiology, molecular pathology
- >50% are active in genetics and virology
- <50% are active in transfusion, transplantation, informatics
- Only 2 IFCC Full Members are active in anatomic pathology

Conclusions:
IFCC should not seek to include anatomic pathology
A case can be made for greater inclusivity in laboratory medicine
IFCC Proposals for Change

- Adopt a similar inclusive approach to companies for Corporate Membership
- Amend Statute 4.1.1 that restricts IFCC Full Membership to one society per country
- Facilitate Full Membership from microbiology, genetics, transplantation, bioinformatics etc
- Open membership to any properly constituted society that is active in laboratory medicine
‘The Great Debate’

• **Where and when?**
  – Sunday 22 June 2014 from 13.45-15.45h
  – Congress Centre, Istanbul, Turkey ([www.ifcc.org](http://www.ifcc.org) for more details)

• **Who can attend and contribute?**
  – Anyone with an interest in the future of laboratory medicine

• **Which topics will be debated?**
  – Drivers for change in laboratory medicine
  – Divisions in laboratory medicine
  – ‘Shaping the Future of Laboratory Medicine’
    • At national and regional level
    • Opportunities for IFCC
    • Implications for IFCC Corporate Members
  – IFCC proposals for change