

Latent Print Development and Identification Survey

The International Association for Identification

Providence, RI

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Why was the ENFSI-FPWG Survey Done?

- For Europe, EU Initiative 2009/C174/03 mandated changes in forensic laboratory practices.
- The Initiative was passed to ensure that results of laboratory practices in one EU country are equivalent to those from another.
- This was to be achieved through accreditation with International Standard EN ISO/IEC 17025.
- It applies to DNA and fingerprints.
- By the end of 2014, the Council shall assess the extent to which member states have complied with this Framework Decision.

The ENFSI-FPWG Survey

- To gauge the current status of laboratories in Europe, a survey was conducted by the ENFSI-FPWG from September 24 – October 6, 2012 for the standards and practices of the identification and development disciplines.
- 36 (42) valid responses were received for the development survey
- 36 (48) valid responses were also obtained for the identification survey

The ENFSI-FPWG Survey – The GUI

The screenshot displays the eSurveyspro web application interface. At the top left is the logo for eSurveyspro, with the tagline "Premium Survey Services". On the top right, a user is welcomed with the email "dmeuwly@gmail.com" and options for "My Account" and "Logout". A navigation menu below the header includes links for Home, Prices, Features, Survey Templates, Company, Resources, and Support. A "Quick links" sidebar on the left lists actions such as "MY ACCOUNT HOME", "CREATE SURVEY", "MANAGE SURVEYS", "CUSTOM SURVEY STYLES", "MANAGE INVITATIONS", and "CREATE NEW POLL". The main content area shows a breadcrumb trail "You are here > Manage Surveys > Survey List" and a "Survey folder" dropdown menu set to "All". Below this is a table listing two surveys, both titled "Status of the practice and the accreditation in the fingerprint field within the ENFSI laboratories - Survey 2012 - A" and "B". Each survey entry includes its creation date (9/18/2012 and 9/21/2012), a "Closed" status, and icons for editing, deleting, and reporting. The "Reports" column shows a count of 36 for each survey.

eSurveyspro
Premium Survey Services

Welcome
dmeuwly@gmail.com
My Account Logout

Home | Prices | Features | Survey Templates | Company | Resources | Support

Quick links

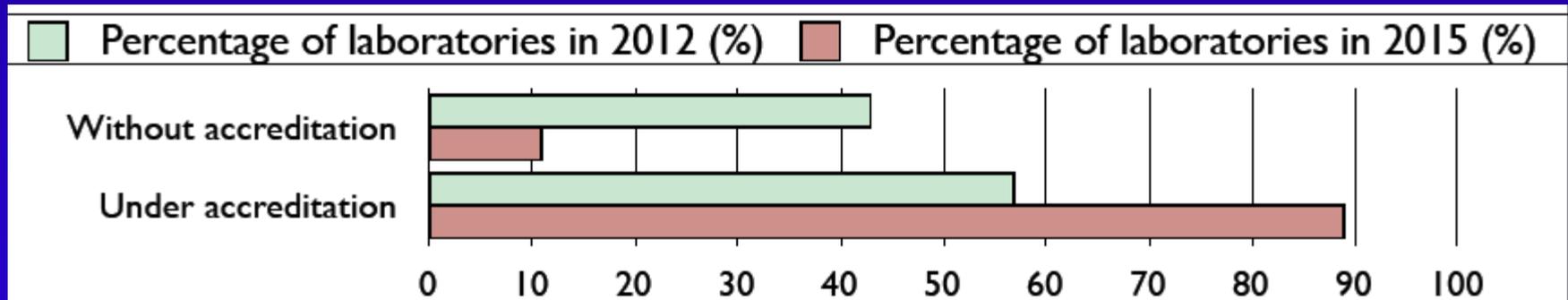
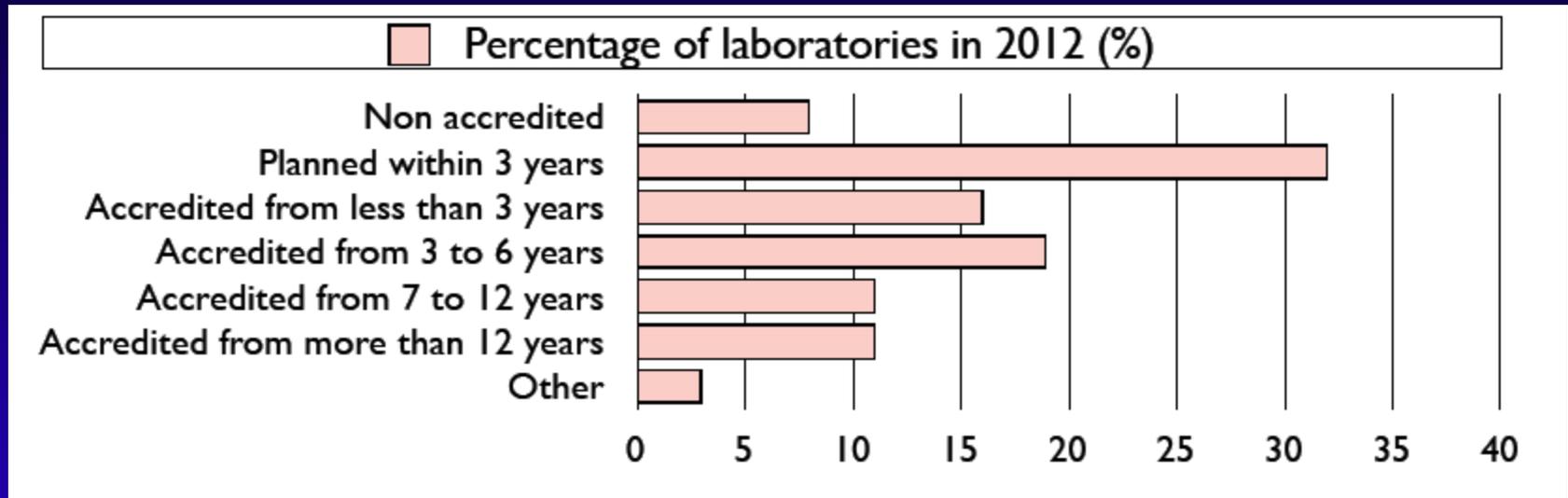
- MY ACCOUNT HOME
- CREATE SURVEY
- MANAGE SURVEYS
- CUSTOM SURVEY STYLES
- MANAGE INVITATIONS
- CREATE NEW POLL

You are here > Manage Surveys > Survey List

Survey folder: All Manage folders

Survey (click to preview)	Created	Status	Edit	Options	Reports	Collect	Clear	Delete
Status of the practice and the accreditation in the fingerprint field within the ENFSI laboratories – Survey 2012 - A	9/18/2012	Closed			36			
Status of the practice and the accreditation in the fingerprint field within the ENFSI laboratories – Survey 2012 - B	9/21/2012	Closed			36			

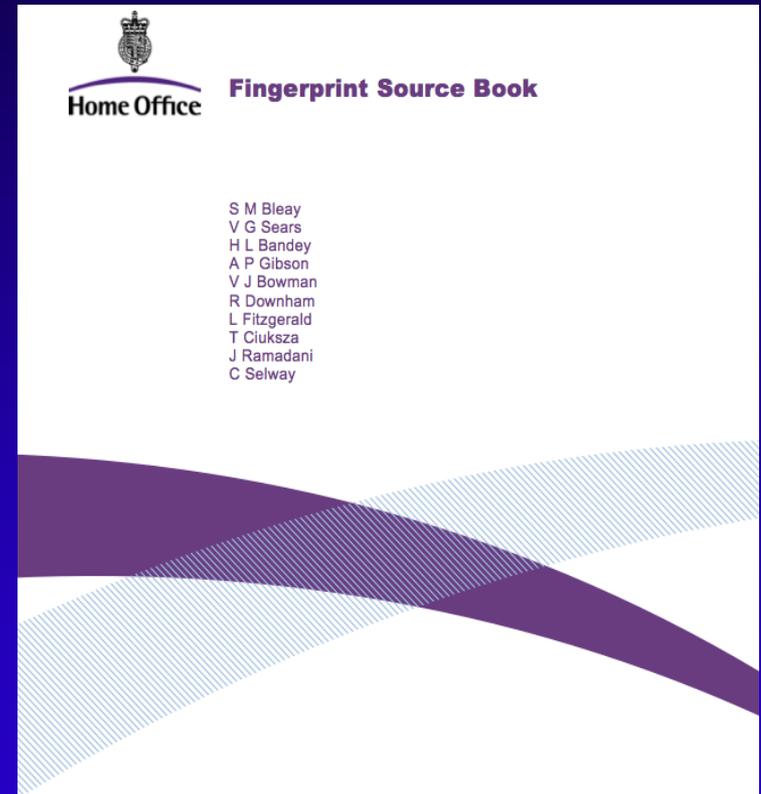
Overall Survey Results – Laboratory Accreditation



The ENFSI-FPWG Detection Survey

The Detection Survey – Literature Source

- The survey focuses on the techniques for the development and imaging of the friction ridge skin impressions mentioned and described in the Home Office Fingerprint source book 2012, which is freely available at: <http://www.homeoffice.gov.uk/publications/science/cast/crime-investigation/fingerprint-source-book-2012/>

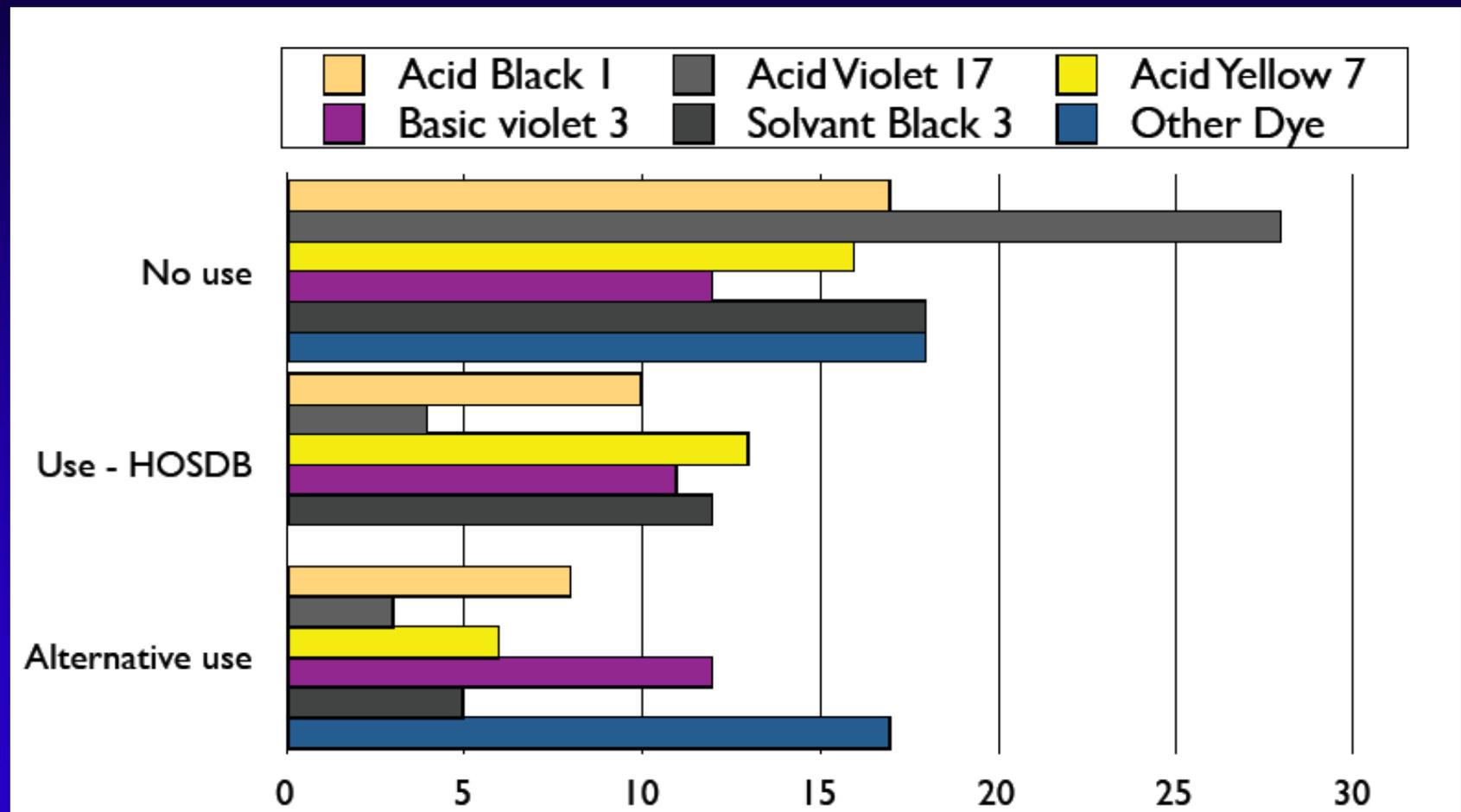


The Detection Survey

- Acid dyes (AB1, AV 17, AY 7)
- Basic violet 3
- DFO
- Ninhydrin
- Physical developer
- Powders
- Small particle reagents
- Solvent black 3 (Sudan Black)
- Superglue (CA Fuming)
- VMD
- UV Imaging
- IR Imaging
- Multispectral imaging
- ESDA
- 1,2-indanedione
- MMD
- Oil Red O

Detection Survey Results

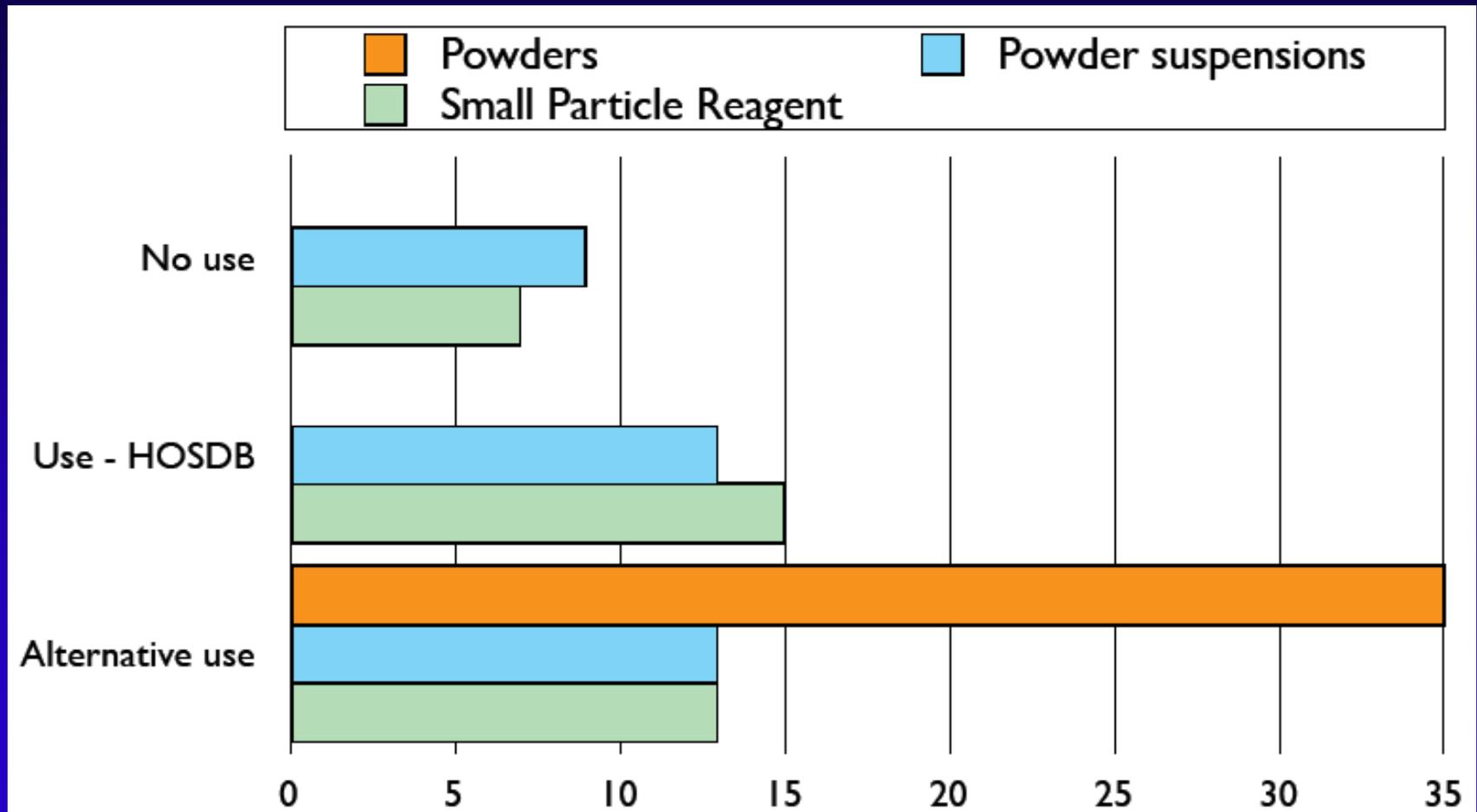
Detection Survey Results – Dyes



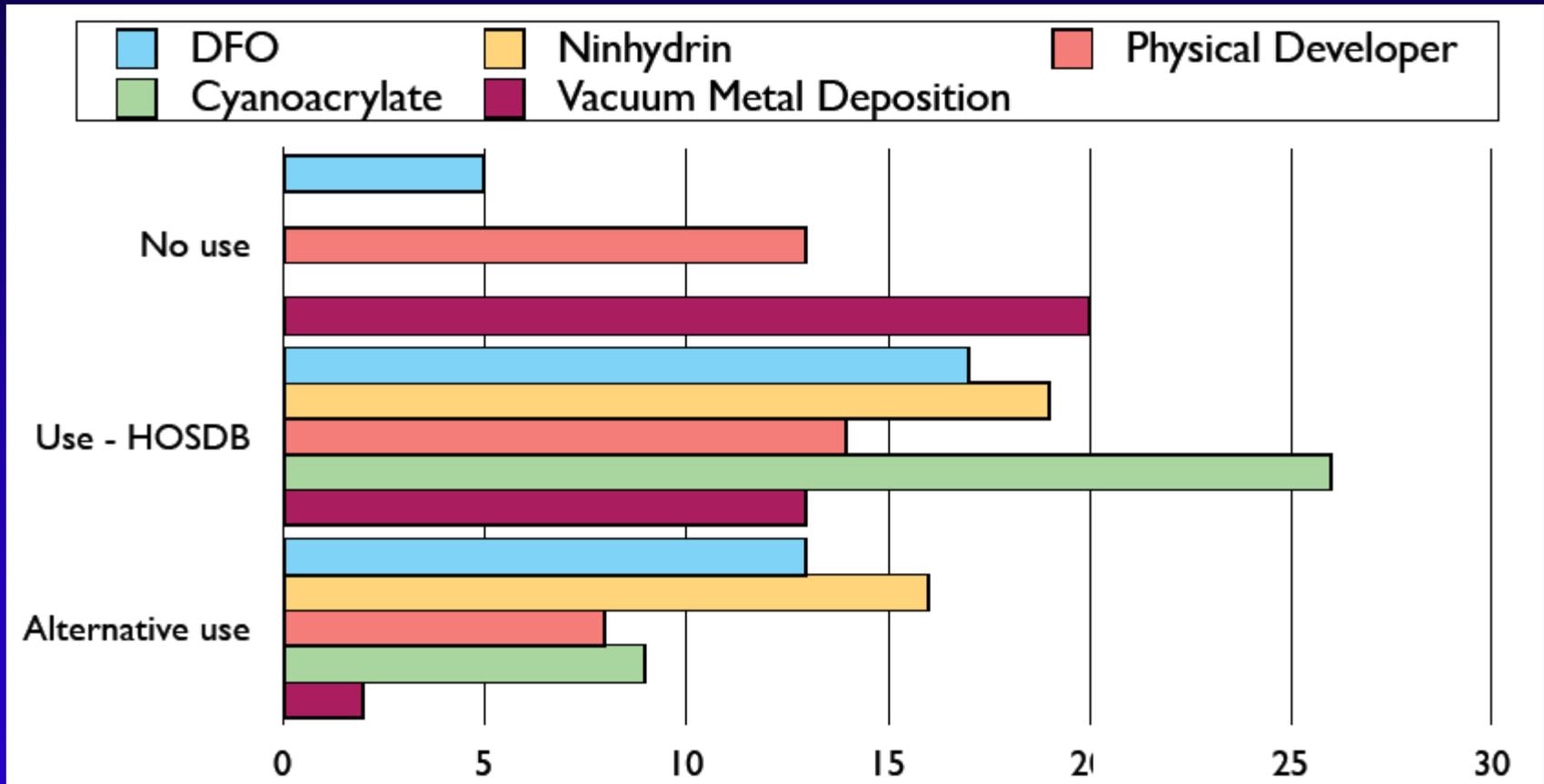
Detection Survey Results – “Other” Dyes

1. Amido black	9. Hungarian red
2. Amido Black - for blood; Cristal Violet, Wet Powder - for sticky tapes (sticky side); Basic Yellow 40 - after the Superglue	10. Oil Red O
3. Rhodamine 6G - Basic Yellow 40	11. 1,8 Diaza-9-Fluorenon Zink-Indandion Safranin Ninhydrin
4. SUDAN BLACK - SIRCHIE CAT.NO.LV504	12. ninhydrin
5. eg. Hungarian Red, Coomassie Blue	13. Amido Black (AB) Basic Yellow 40 (BY)
6. Amido black Basic Yellow 40	14. Basic Yellow
7. Leuco crystal violet	15. Wet Powder
8. Basic Yellow - 40 Basic Red - 28	16. Amido Black

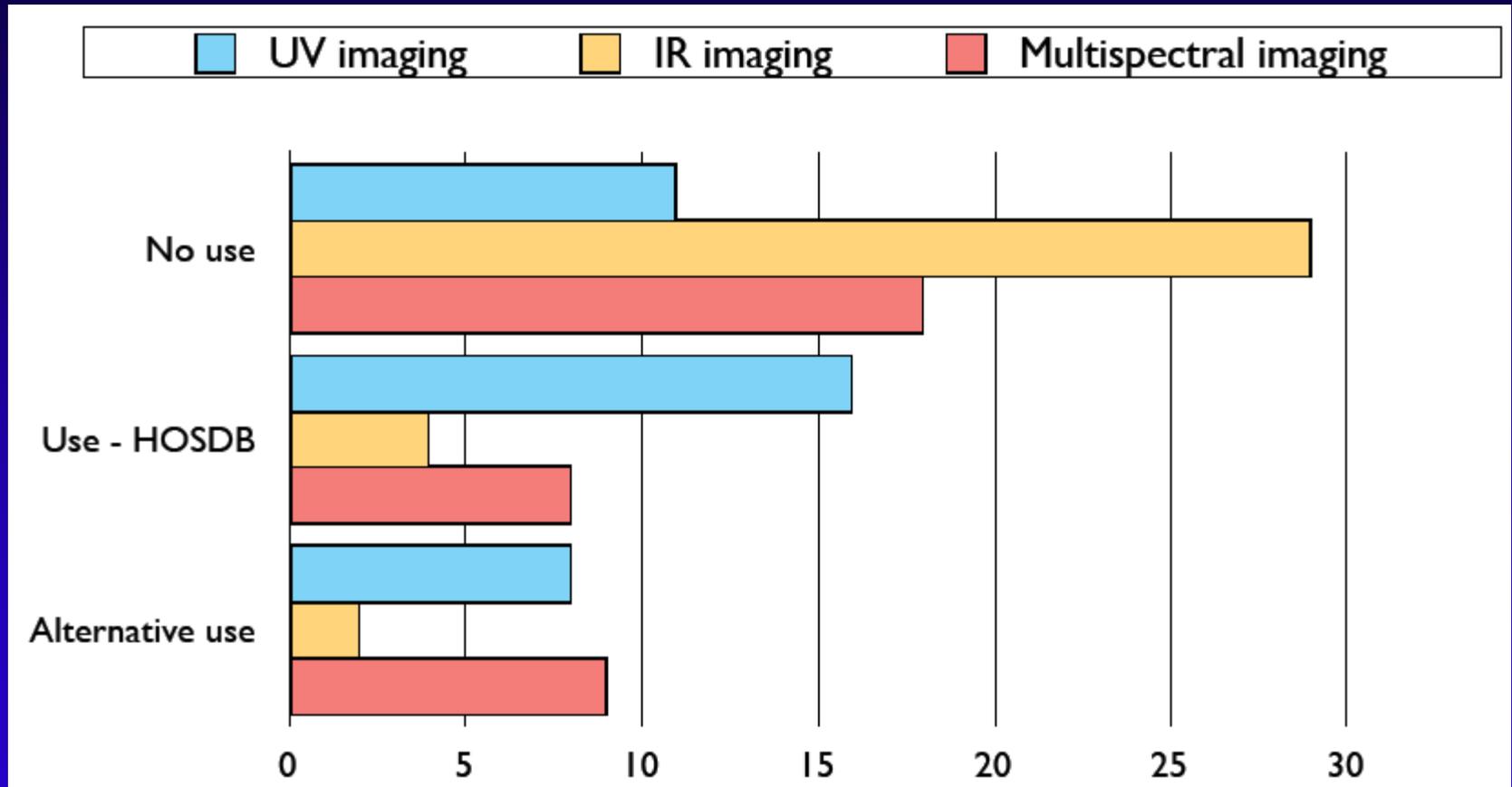
Detection Survey Results – Powders



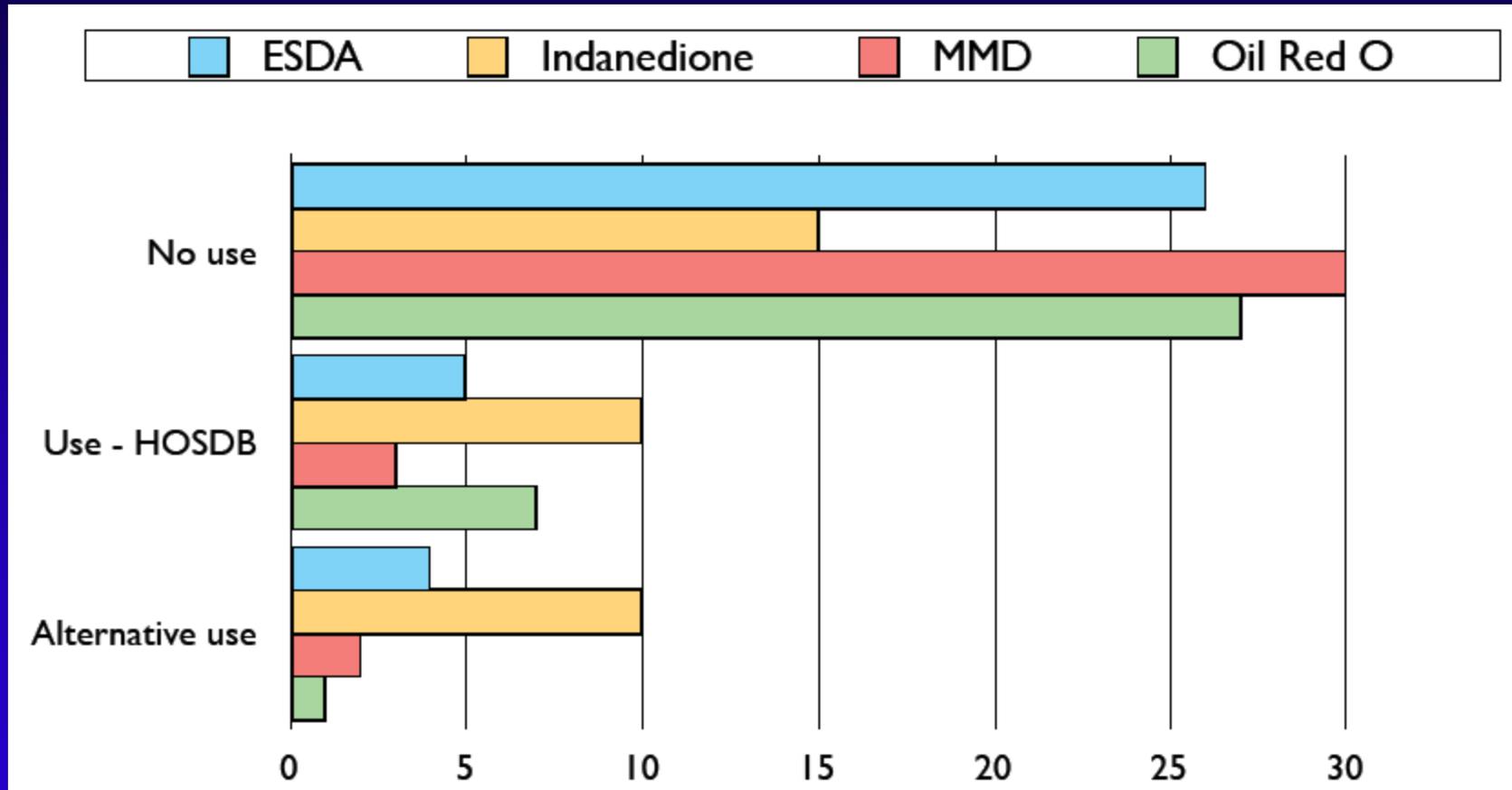
Detection Survey Results – Chemical Methods



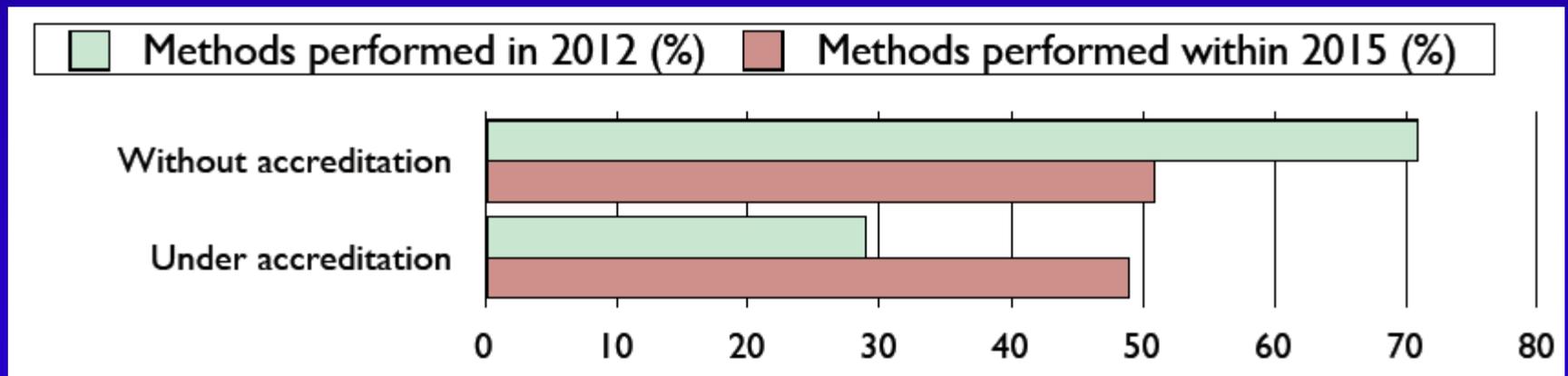
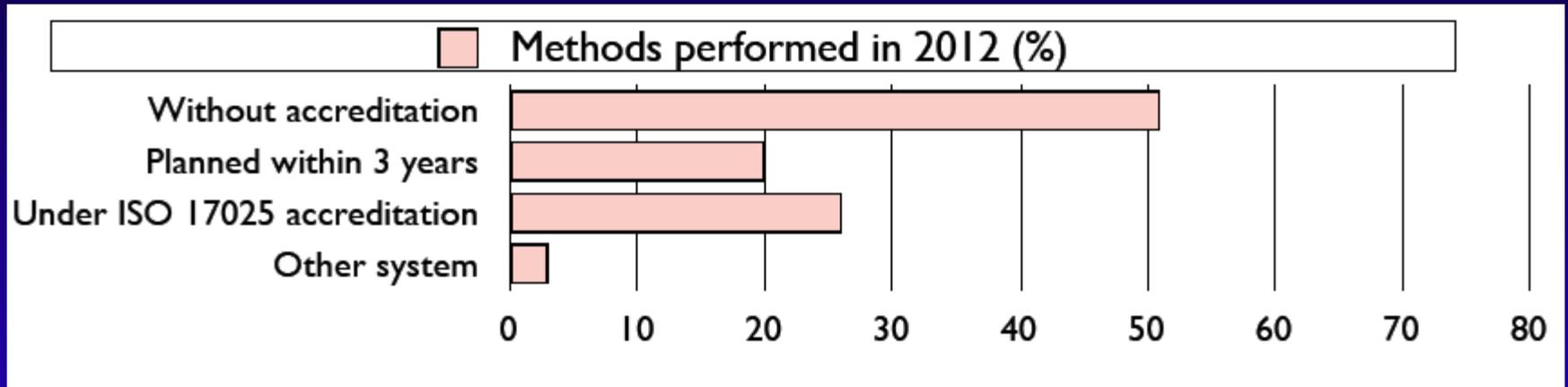
Detection Survey Results – Imaging



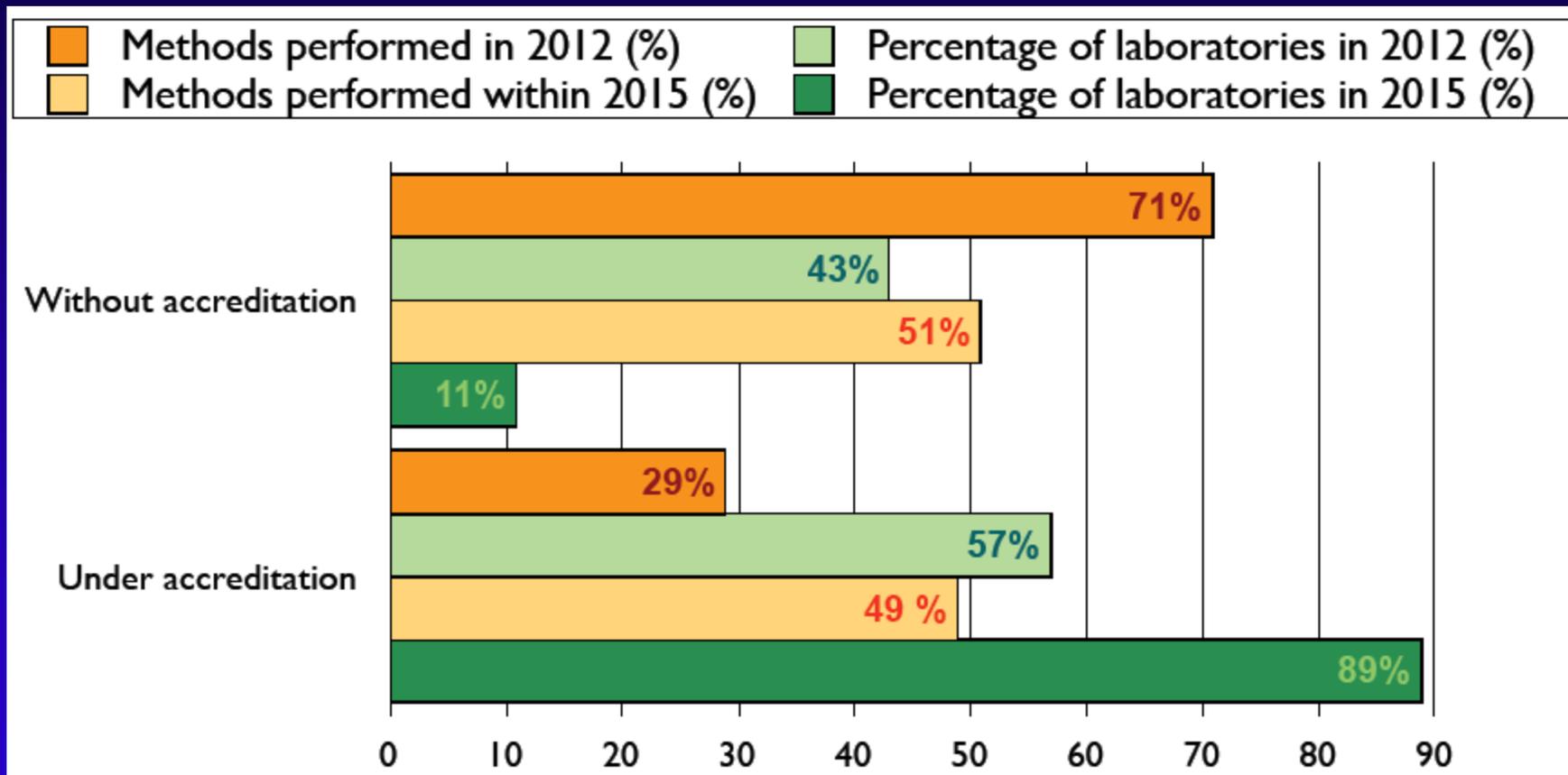
Detection Survey Results – Alternate Methods



Detection Survey Results – Method Accreditation



Detection Survey Results – Method Accreditation



Detection Survey Results – Method Accreditation

- In 2011, ASCLD-International published a series of supplemental requirements.
- Section 5.4.5.4 states:

“Prior to implementation of a validated method new to the laboratory, the reliability of the method shall be demonstrated in-house against documented performance characteristics of that method. Records of performance shall be retained for future reference.”
- This new requirement is subject to interpretation, but one possible implication is that every new or modified method or piece of equipment will have to undergo validation testing under that particular laboratory’s conditions regardless of whether or not the new method or piece of equipment has been externally validated.

The ENFSI-FPWG Identification Survey

The Identification Survey – Literature Sources

EFPWG Best practice manual



Best Practice Manual for Fingerprint Examination

European Fingerprint Working Group

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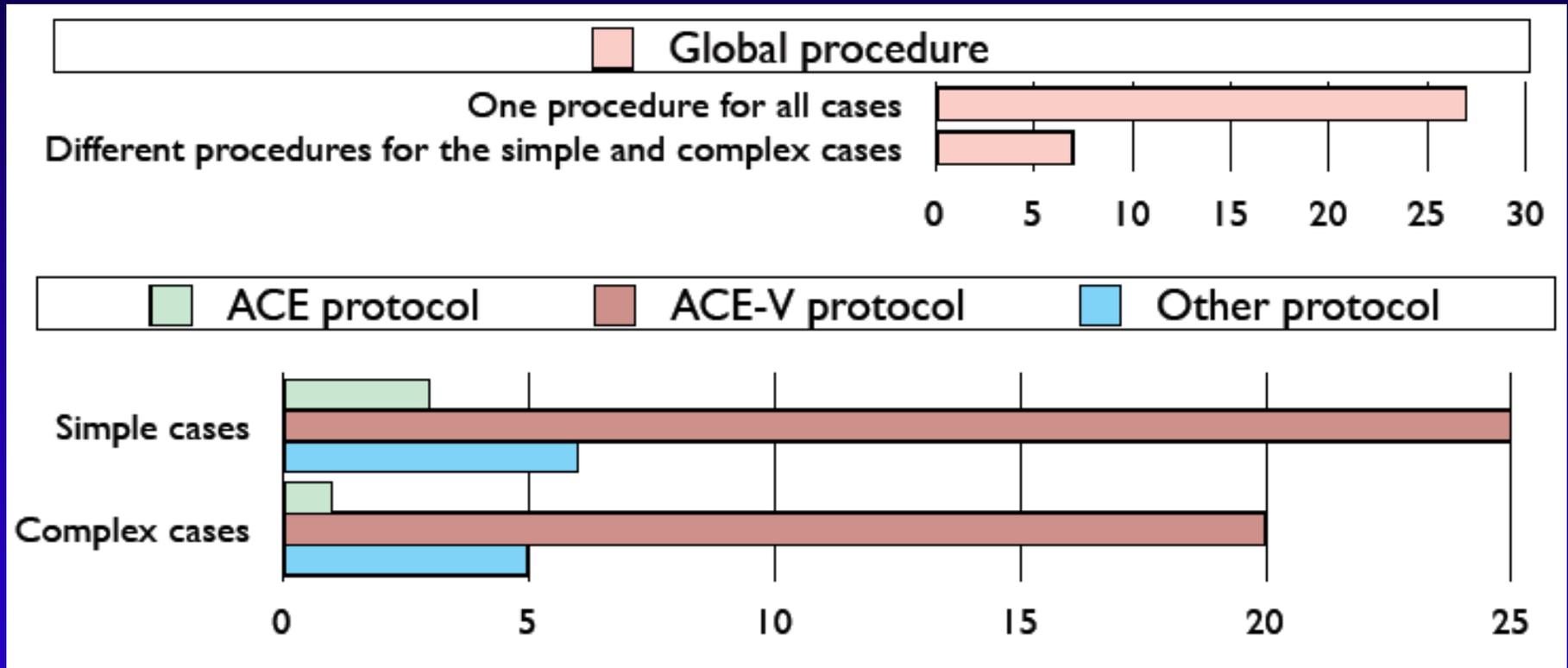
[Adobe Acrobat PDF Help Page](#)

DRAFTS FOR COMMENT The comment period is currently closed. Final Documents will be available soon.

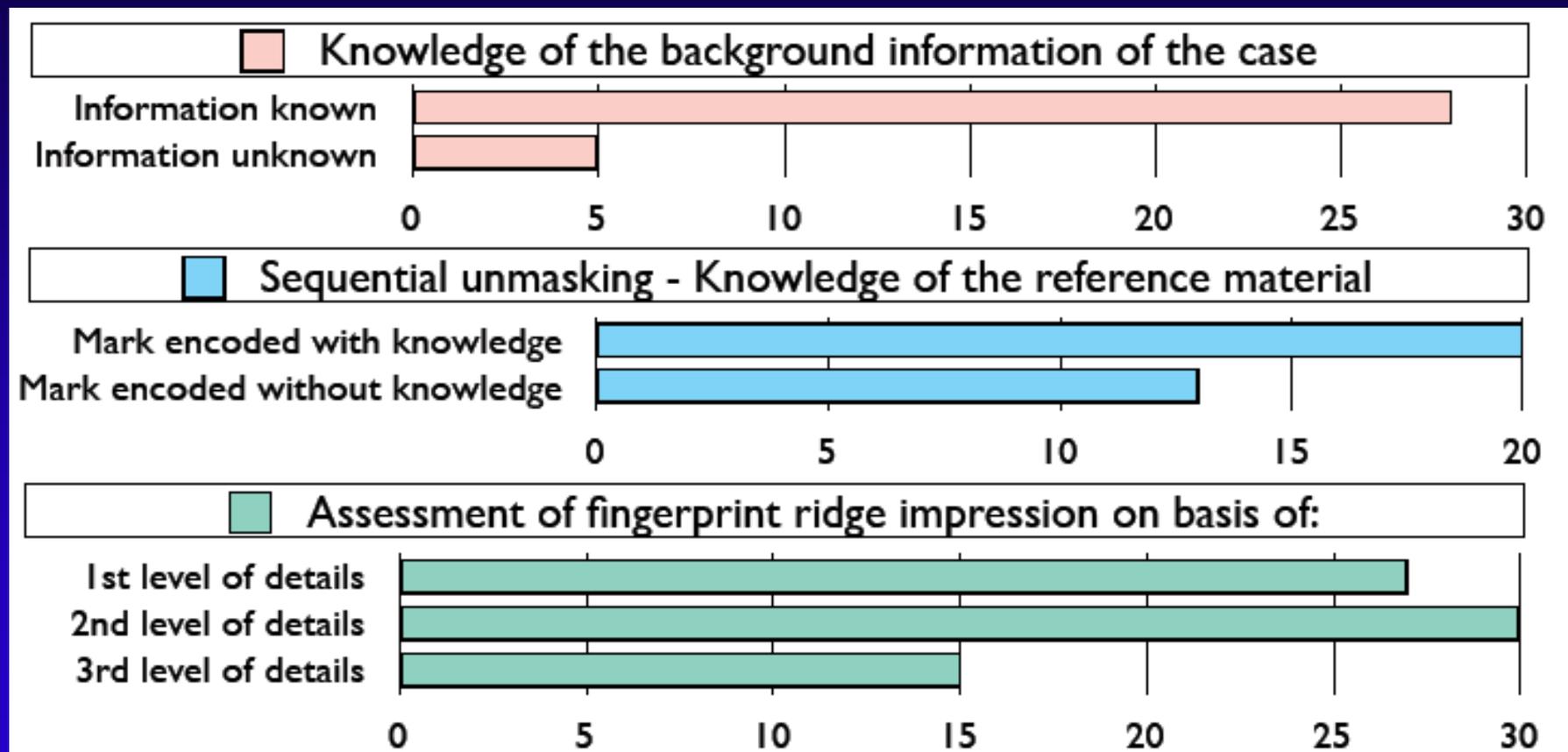
Standard for the Review of Testimony of Friction Ridge Examiners (Latent/Tenprint) (DOC)	Version 1.0	DRAFT PDF	+ Archived
Standard for a Quality Assurance Program in Friction Ridge Examinations (Latent/Tenprint) (DOC)	Version 4.0	DRAFT PDF	+ Archived
Standard for the Documentation of Analysis, Comparison, Evaluation and Verification (ACE-V) (Latent) (DOC)	Version 1.2	DRAFT PDF	+ Archived
Standard for Friction Ridge Digital Imaging (Latent/Tenprint) (DOC)	Version 1.2	DRAFT PDF	+ Archived
LATENT AND TENPRINT			
Model Policy for Friction Ridge Examiner Conduct (Latent & Tenprint)	Version 1.0	Current PDF	+ Archived
Standard for Friction Ridge Automation Training (Latent/Tenprint)	Version 1.0	Current PDF	+ Archived
Standard for Friction Ridge Computer Proficiency Testing Program (Latent/Tenprint) (Version 1.0)	Version 1.0	Current PDF	+ Archived
Standard for Friction Ridge Digital Imaging (Latent/Tenprint)	Version 1.1	Current PDF	+ Archived
Standard for the Application of Blind Verification (Latent/Tenprint)	Version 1.0	Current PDF	+ Archived
Standard for the Definition and Measurement of Rates of Errors and Inappropriate Decisions in Friction Ridge Examination (Latent/Tenprint) (DOC)	Version 1.2	Current PDF	+ Archived
Standard for the Technical Review of Friction Ridge Examinations (Latent/Tenprint)	Version 1.0	Current PDF	+ Archived
Standard for the Validation and Performance Review of Friction Ridge Impression Development and Examination Techniques (Latent/Tenprint)	Version 1.0	Current PDF	+ Archived

Detection Survey Results

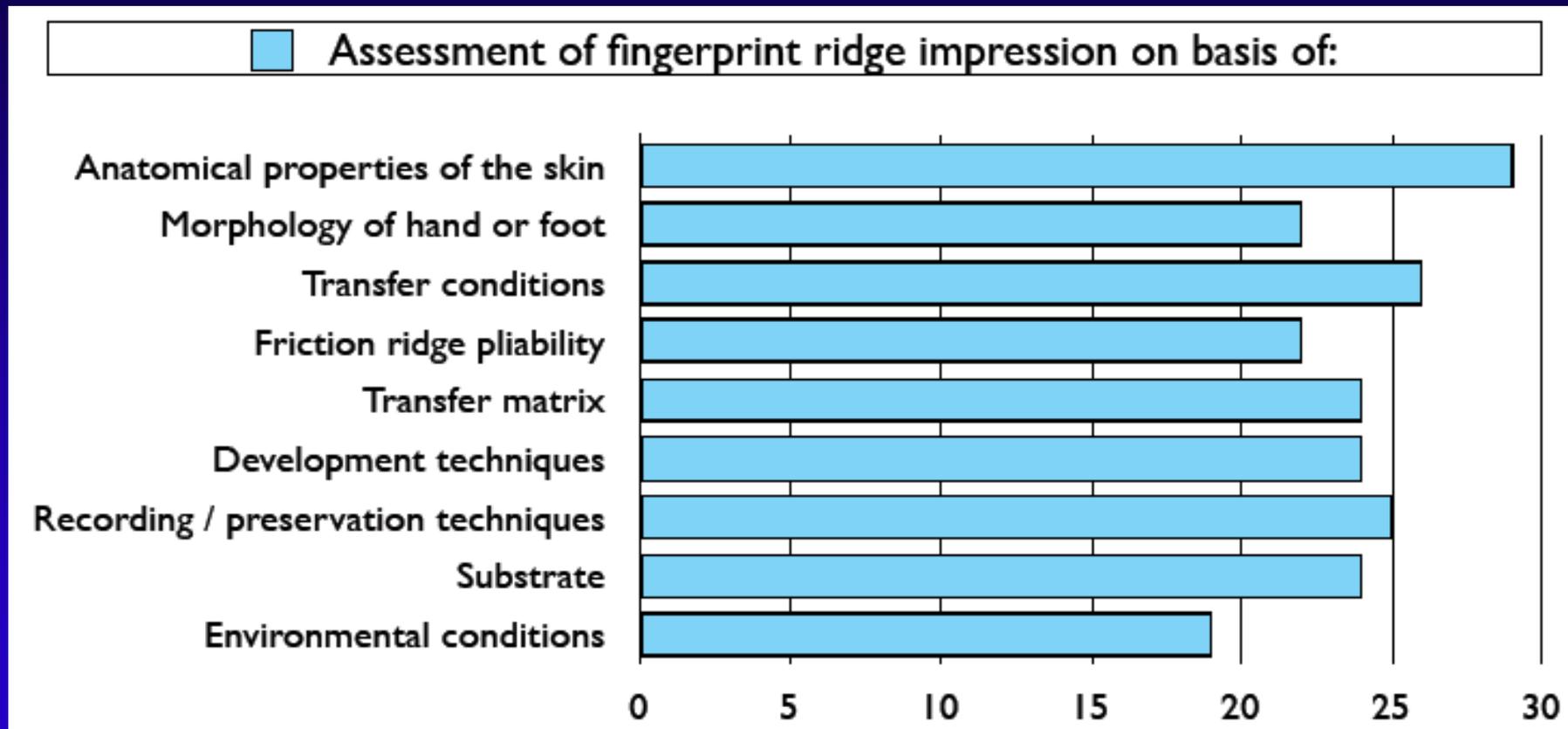
The Identification Survey



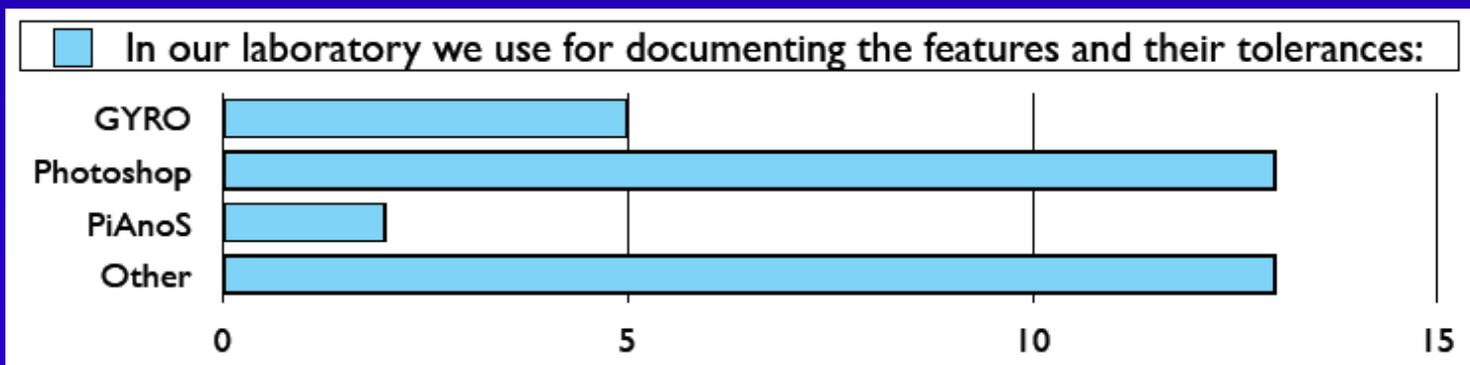
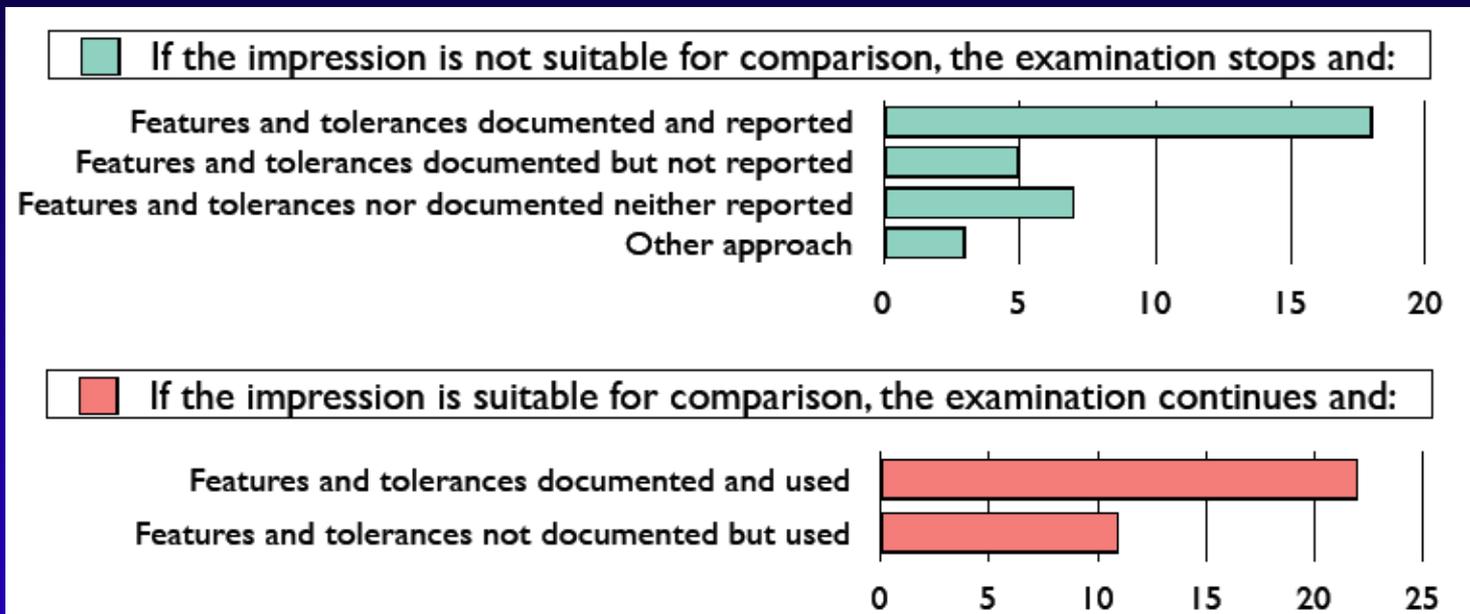
The Identification Survey – Analysis Phase



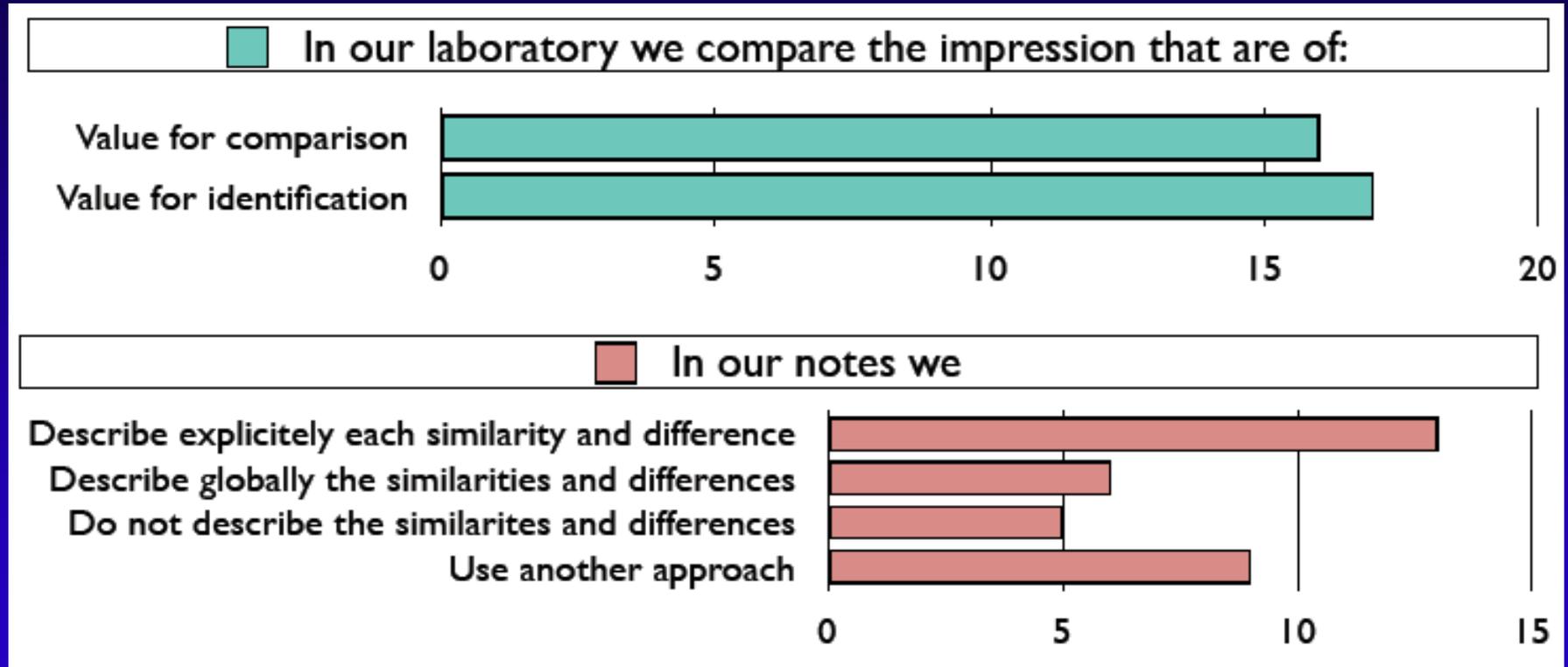
The Identification Survey – Analysis Phase (Features)



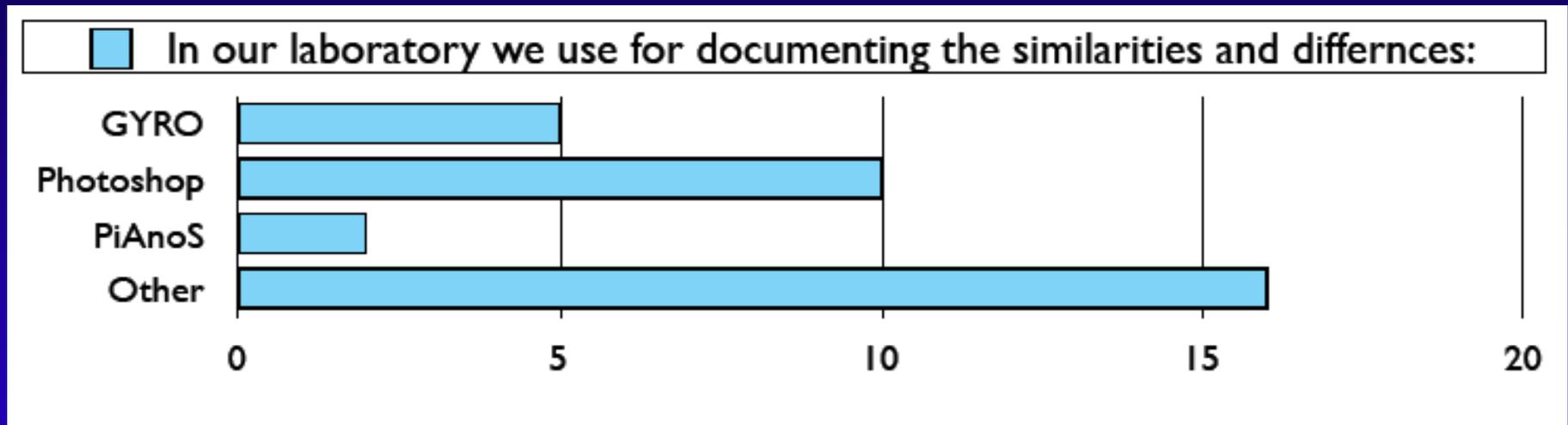
The Identification Survey – Analysis Phase (Documentation)



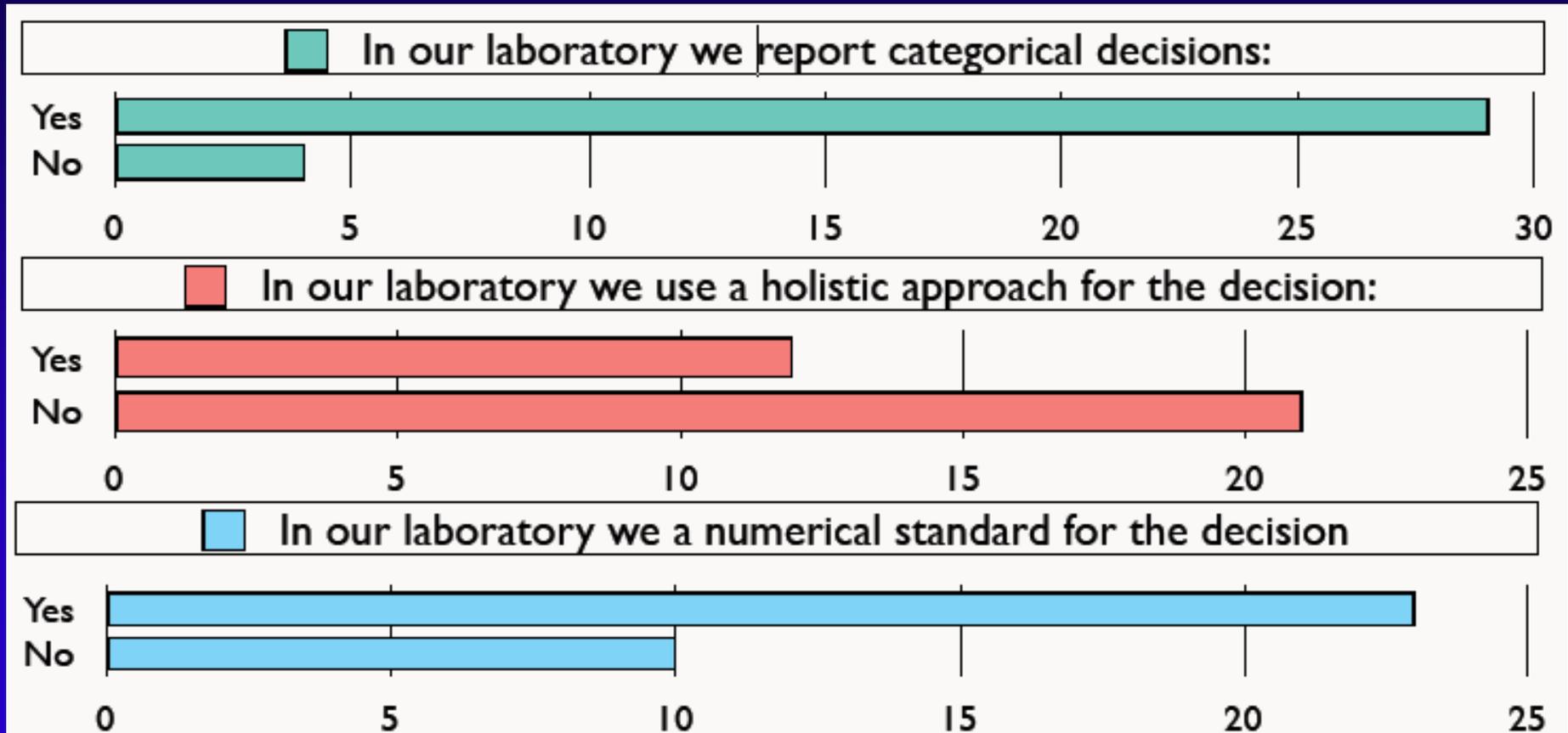
The Identification Survey – Comparison Phase



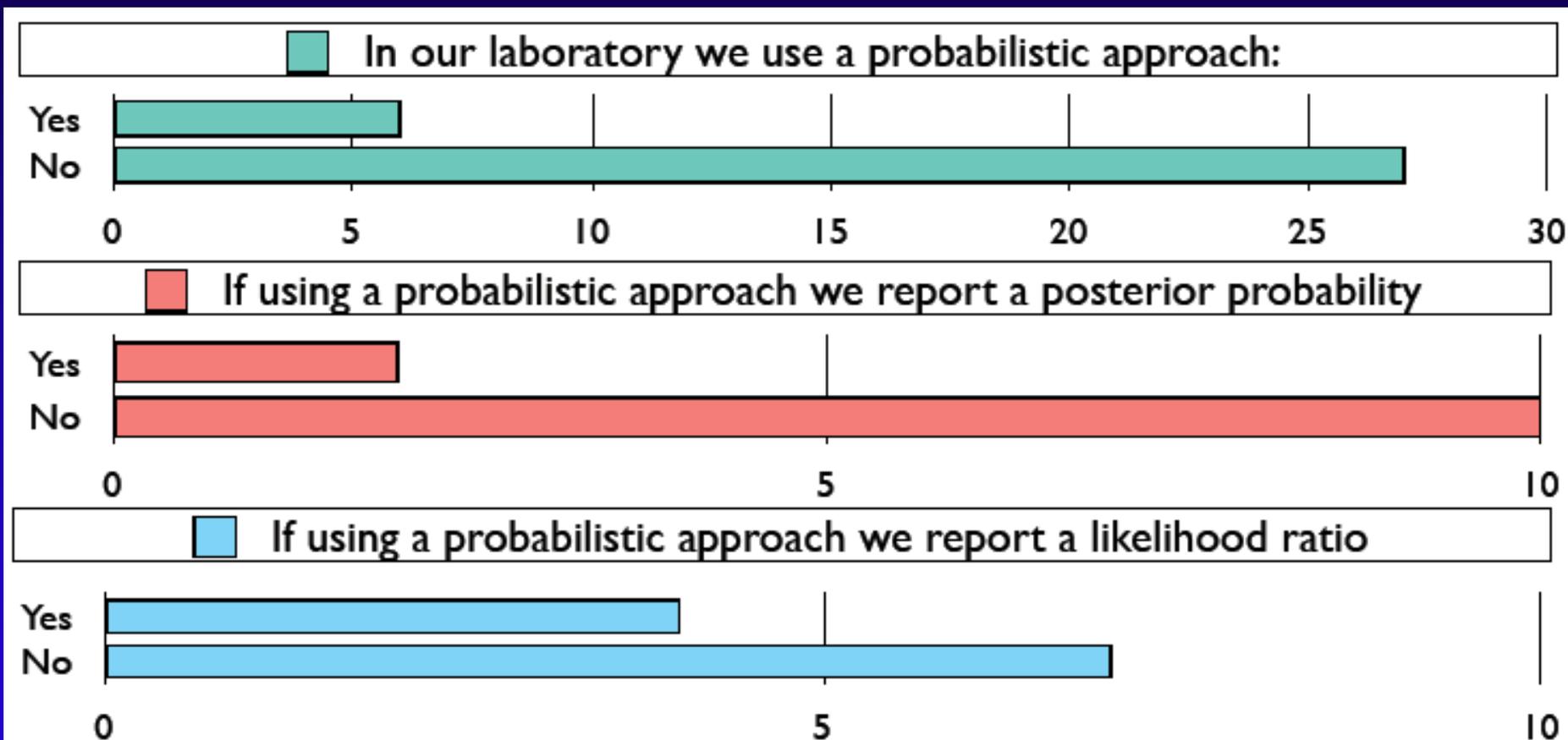
The Identification Survey – Comparison Phase (Documentation)



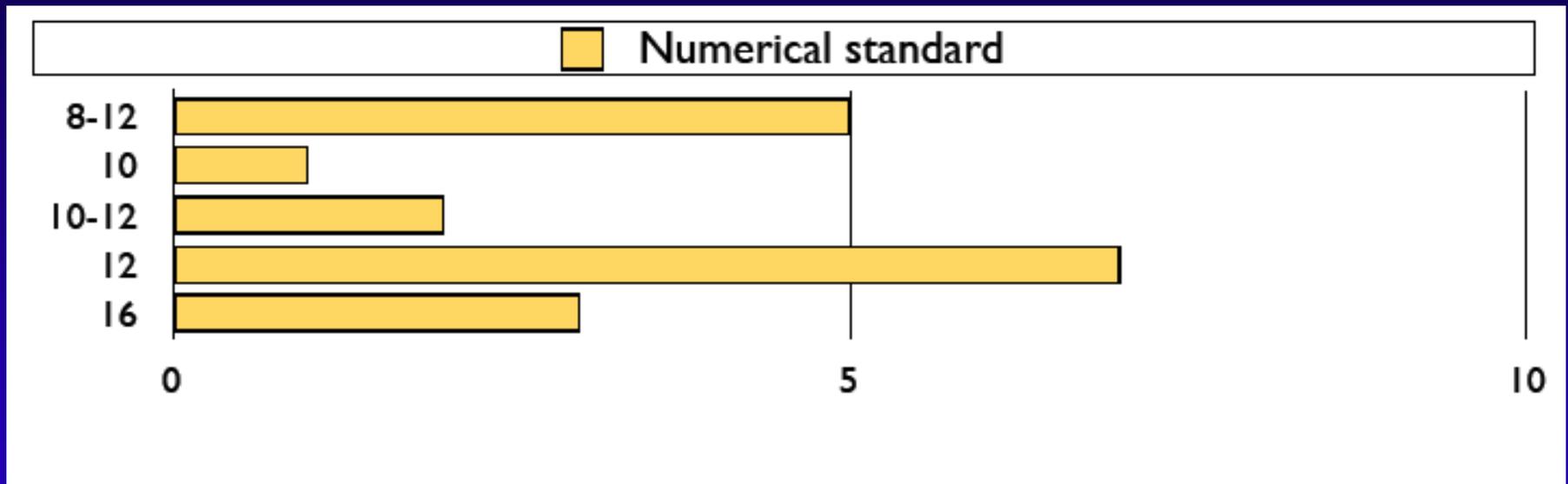
The Identification Survey – Comparison Phase (Framework)



The Identification Survey – Comparison Phase (Framework)



The Identification Survey – Comparison Phase (Numerical Standards)

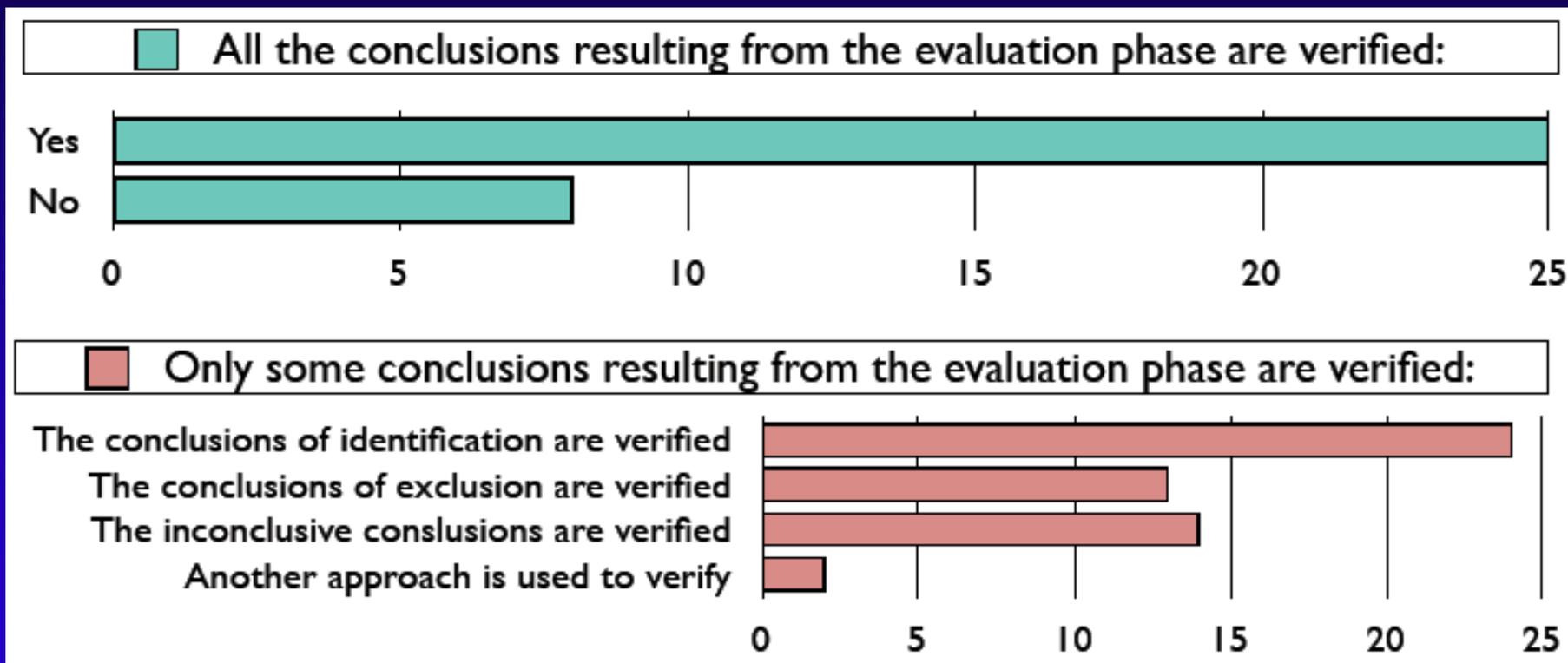


The Identification Survey – Comparison Phase (Numerical Standards)

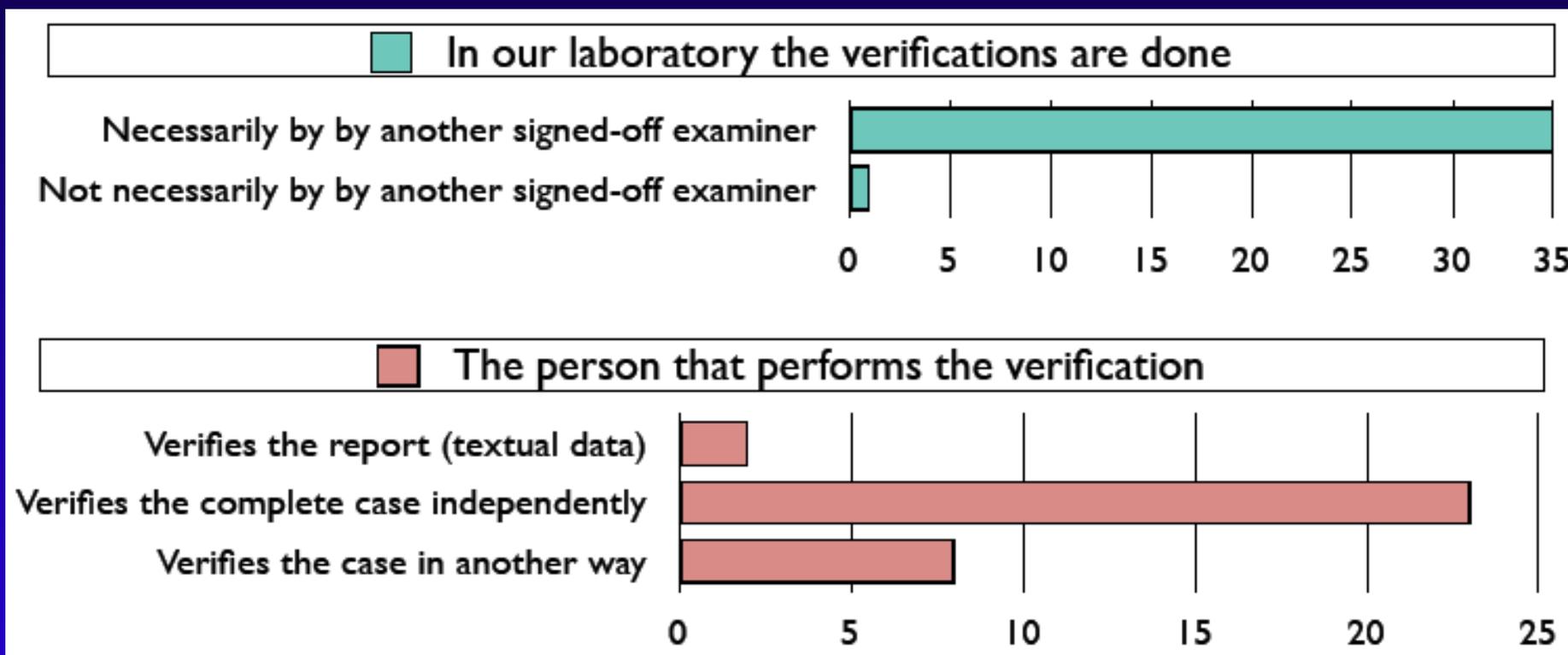
- In 1914, Locard formed his famous “Tri-partite Rule”.
- Prints with more than 12 points and that are clear and sharp are identifiable.
- The second part of the rule stated that when there are 8-12 points in common, then:

“Certainty is a function of clarity, sharpness of the mark, the rarity of its type, the presence of pores, the perfect identity of papillary ridges and grooves thickness, the direction of lines and the angular value of bifurcations.”
- The third part of the rule implies that when less than 8 points are in common, the print “does not provide a certainty, but only a presumption proportional to the number of points and their clarity/sharpness.”

The Identification Survey – Verification Phase



The Identification Survey – Verification Phase



The Identification Survey – Conflict Resolution

- “(1) The case goes to 2 examiners who do not know the case/conflict. (2) If not solved it goes to another bureau of the same organization (different city)”
- “If no agreement a 3rd and 4th expert”
- “Decision made by leading examiner”
- “The case is submitted for a 2nd verification to another examiner. A meeting is then organized where the conclusions of the different participants are presented and motivated. Examiners go through their conflicting results and form a common conclusion. If they cannot reach a common conclusion, the matter will be referred to the head of the team for decision. Examination results and conclusions are documented in Laboratory Information Management System.”
- “Fight!”

The ENFSI-FPWG Survey – Conclusions

- The majority of laboratories in the EU will be ISO 17025 accredited by the deadline of 2015.
- In practice, by 2015 the majority of development techniques are and will be performed without accreditation.
- Interestingly, ISO 17025 accreditation covers laboratories that are using very different examination procedures that are sometimes conflicting.

What's Next?

- The IAI (International Representative) in conjunction with the ENFSI-FPWG (Quality Correspondent) have decided to re-issue the surveys to the IAI membership.
- The surveys are still being refined for use by non-ENFSI membership
- When the surveys are complete and ready for distribution, announcements will be made through a variety of platforms, including the IAI website (www.theiai.org); the Complete Latent Print Examination website (www.clpex.com); Ed German's Latent Print Examination website (www.onin.com).
- Survey launch will most likely be in early 2014.
- In order to maximize the potential for these surveys, respondents are encouraged to provide as much detail as possible (the time required to complete each survey should be in the 10-15 minute range).

Questions/Contact Information

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