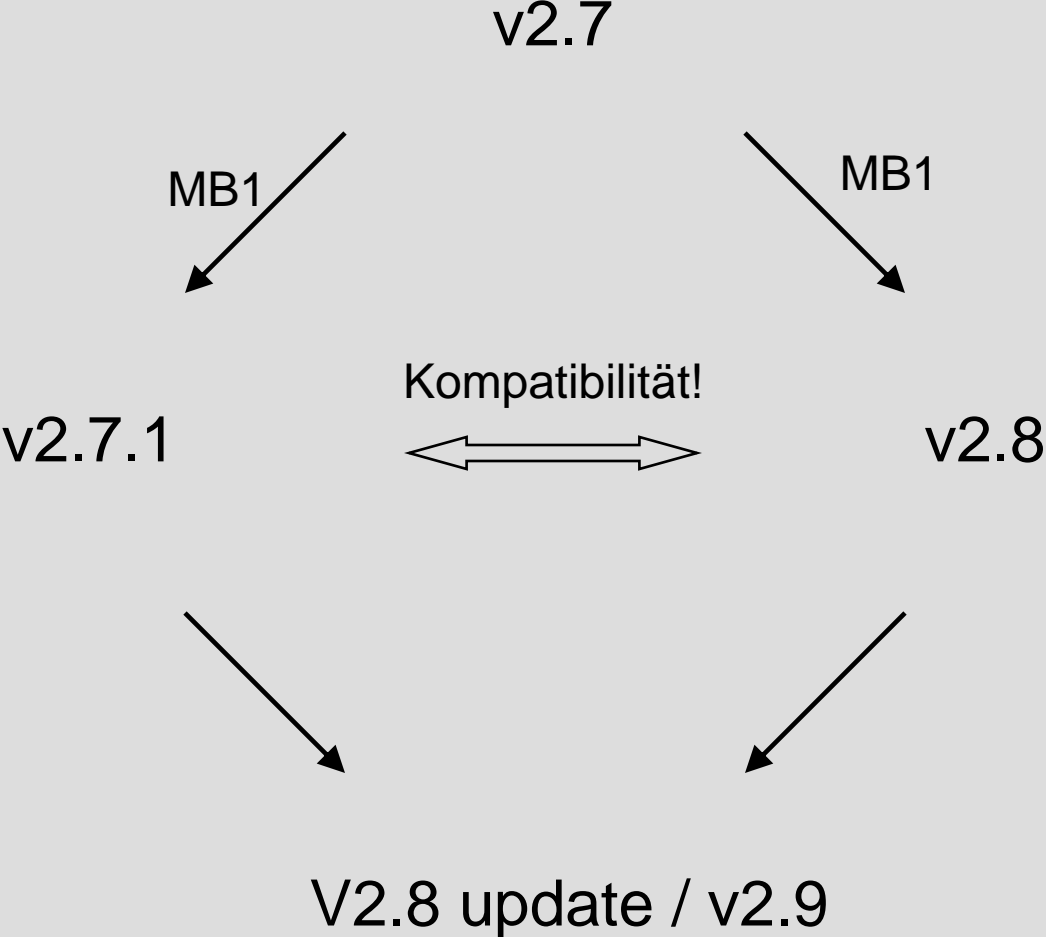


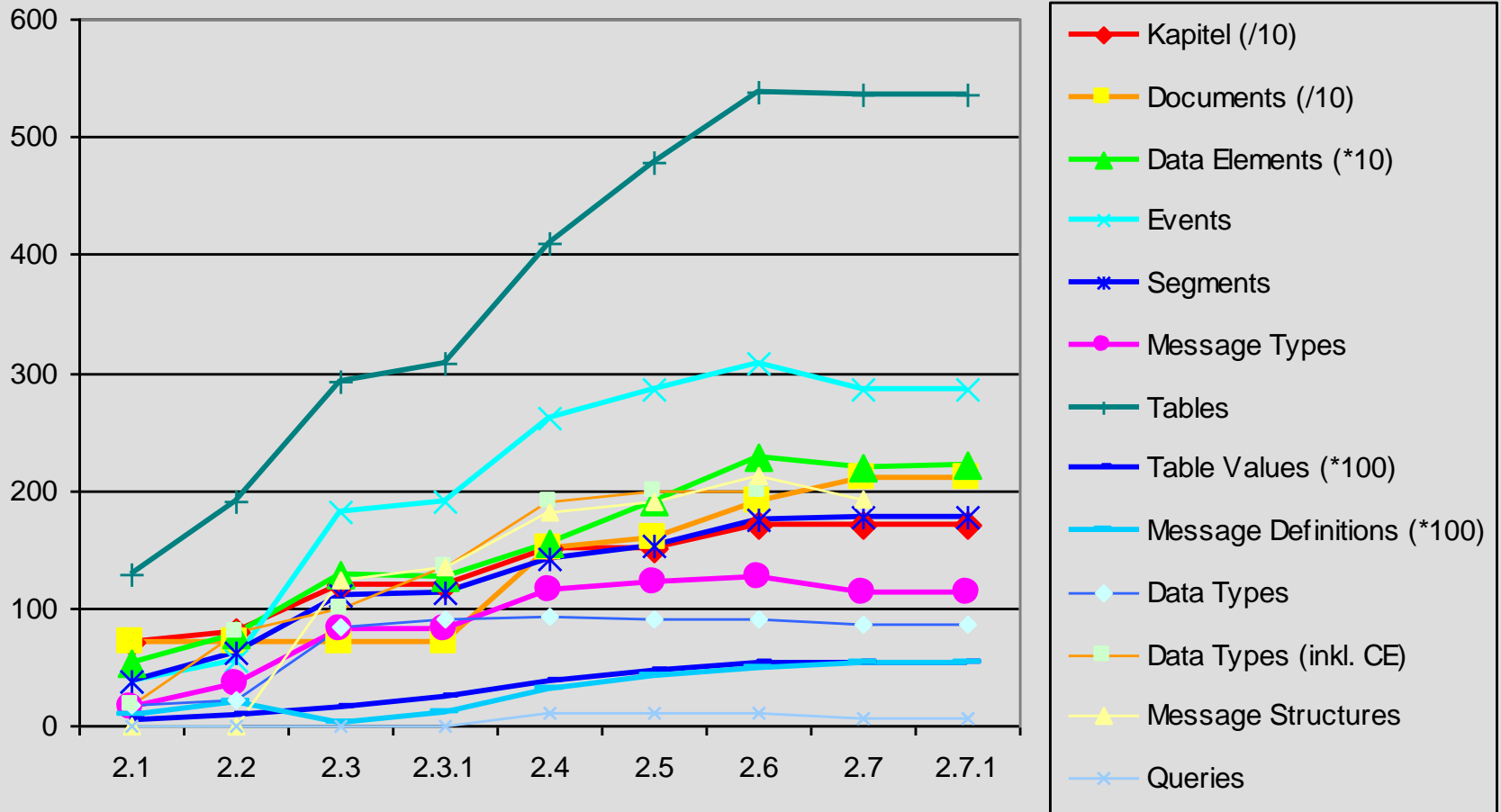
# HL7 v2.8: Update

Dr. Frank Oemig  
27.10.2011

# Next Version?



# Statistik



Version 2.7

# V2.7: Length

- Normative handling of length
- Finally specified in message profiles
- Minimum/Maximum Length („Len“)
  - For coded fields
- Conformance length („C.LEN“)
  - Guidance: minimal supported length
  - For all fields
  - Truncation indication
    - Is truncation allowed or not?
      - „=„: no
      - „#“: yes

# Truncation Delimiter

- Indicates truncation of information
- Starting with v2.7
- Used as escape sequence instead of last character of field/component
- Special escape character
  - MSH-2: optional 5th character
  - Default: “#”

```
..|This is a very long text which is \#\|..
```



Version 2.7.1

## v2.7.1: new field

- OBR:

- OBR-13: Relevant Clinical Information

- ST -> CWE, repeating

- OBR-51: empty

- OBR-52: empty

- OBR-53: empty

- OBR-54: result copy request state

Reserved for compatibility  
with v2.8

Compatible?

US initiative to develop  
a Lab Results Interface implementation guide

# Condition usage

HL7 Optionality	Allowed Conformance Usage	Comment
R - Required	R	
RE - Required but may be empty	RE, R	
O - Optional	R, RE, O, C(a/b), X	O is only permitted for constrainable profiles
C - Conditional	C(a/b), R	“a” and “b” shall be one of “R”, “RE”, “O” or “X”. “a” and “b” shall be different.
X – Not Supported	X	
B – Backward Compatibility	R, RE, O, C(a/b), X	B is only permitted for constrainable definitions
W - Withdrawn	X	

Version 2.8

# Clarification of Usage: Sender

Usage/Optionality	Description	Implementation Requirement	Operational Requirement
R	Required	The application shall implement “R” elements.	The application shall populate “R” elements with a non-empty value.
RE	Required but may be empty	The application shall implement “RE” elements.	The application shall populate “RE” elements with a non-empty value if there is relevant data. The term “relevant” has a confounding interpretation in this definition <sup>[1]</sup> .
C	Conditional	The application shall implement “C” elements.	The application shall populate “C” elements with a non-empty value if the condition predicate associated with the element is true (See section <a href="#">2.A.1.4</a> , "Condition predicate"). The application shall NOT populate “C” elements if the condition associated with the element is false. (NOTE: If the condition predicate is satisfied, C and R are equivalent from an operational viewpoint. If the predicate is NOT satisfied, C and X are equivalent from an operational viewpoint).
CE	Conditional but it may be empty	The application shall implement “CE” elements.	The application shall populate “CE” elements with a non-empty value if the condition predicate associated with the element is true and if there is relevant data (See section <a href="#">2.A.1.4</a> , "Condition predicate"). The application shall NOT populate “CE” elements if the condition associated with the element is false. (NOTE: If the condition predicate is satisfied, CE and RE are equivalent from an operational viewpoint. If the predicate is NOT satisfied, CE and X are equivalent from an operational viewpoint).
X	Not supported	The application shall not implement “X” elements.	The application shall not populate “X” elements.
O	Optional	The usage indicator for this element has not yet been defined, i.e. require to constrain it further to the ones listed above in derived profiles. For an implementation profile all optional elements must be profiled to R, RE, C, CE, or X.	Not Applicable.

# Clarification of Usage: Receiver

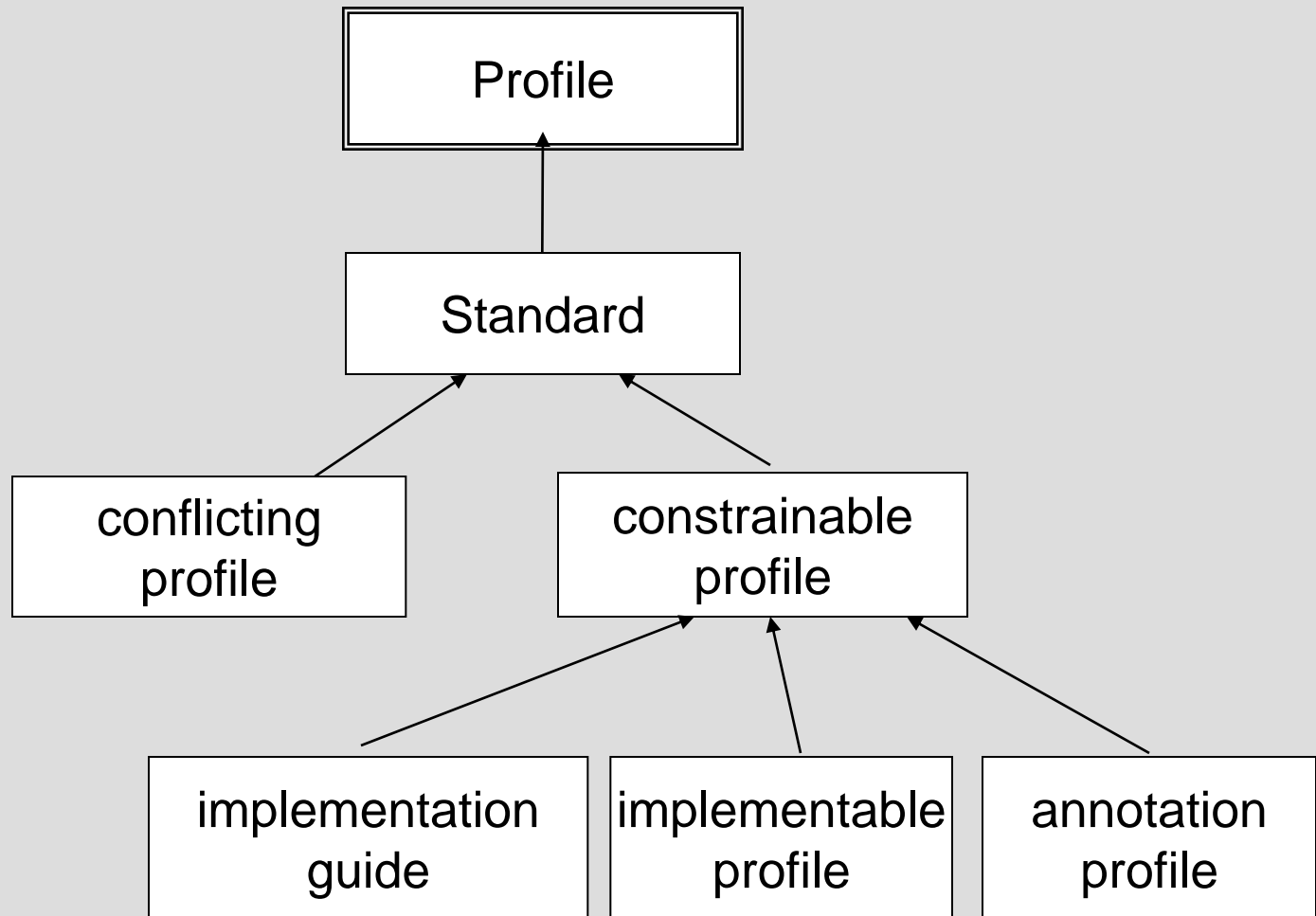
Presence Indicator	Description	Implementation Requirement	Operational Requirement
R	Required	The application shall implement “R” elements.	<b>The receiving application shall process (save/print/archive/etc.) the information conveyed by a required element.</b> A receiving application shall raise an exception due to the absence of a required element. A receiving application shall not raise an error due to the presence of a required element,
RE	Required but may be empty	The application shall implement “RE” elements.	The receiving application shall process (save/print/archive/etc.) the information conveyed by a required but may be empty element. The receiving application shall process the message even if the element is omitted (that is, an exception shall not be raised because the element is missing).
C	Conditional	The application shall implement “C” elements.	The receiving application shall process (save/print/archive/etc.) the information conveyed by a conditional element if the condition predicate associated with the element is true (See section 2.A.1.4, "Condition predicate"). A receiving application shall raise an exception due to the absence of a conditional element if the condition predicate associated with the element is true. A receiving application shall not raise an error due to the presence of a conditional element if the condition predicate associated with the element is true, A receiving application shall raise an error due to the presence of a conditional element if the condition predicate associated with the element is false,
CE	Conditional but it may be empty	The application shall implement “CE” elements.	The receiving application shall process (save/print/archive/etc.) the information conveyed by a conditional but may be empty element if the condition predicate associated with the element is true. The receiving application shall process the message if the element is omitted (that is, an exception shall not be raised because the element is missing). A receiving application shall raise an error due to the presence of a <b>conditional but may be empty element if the condition predicate</b> associated with the element is false,

# Testing Conformity Assessments

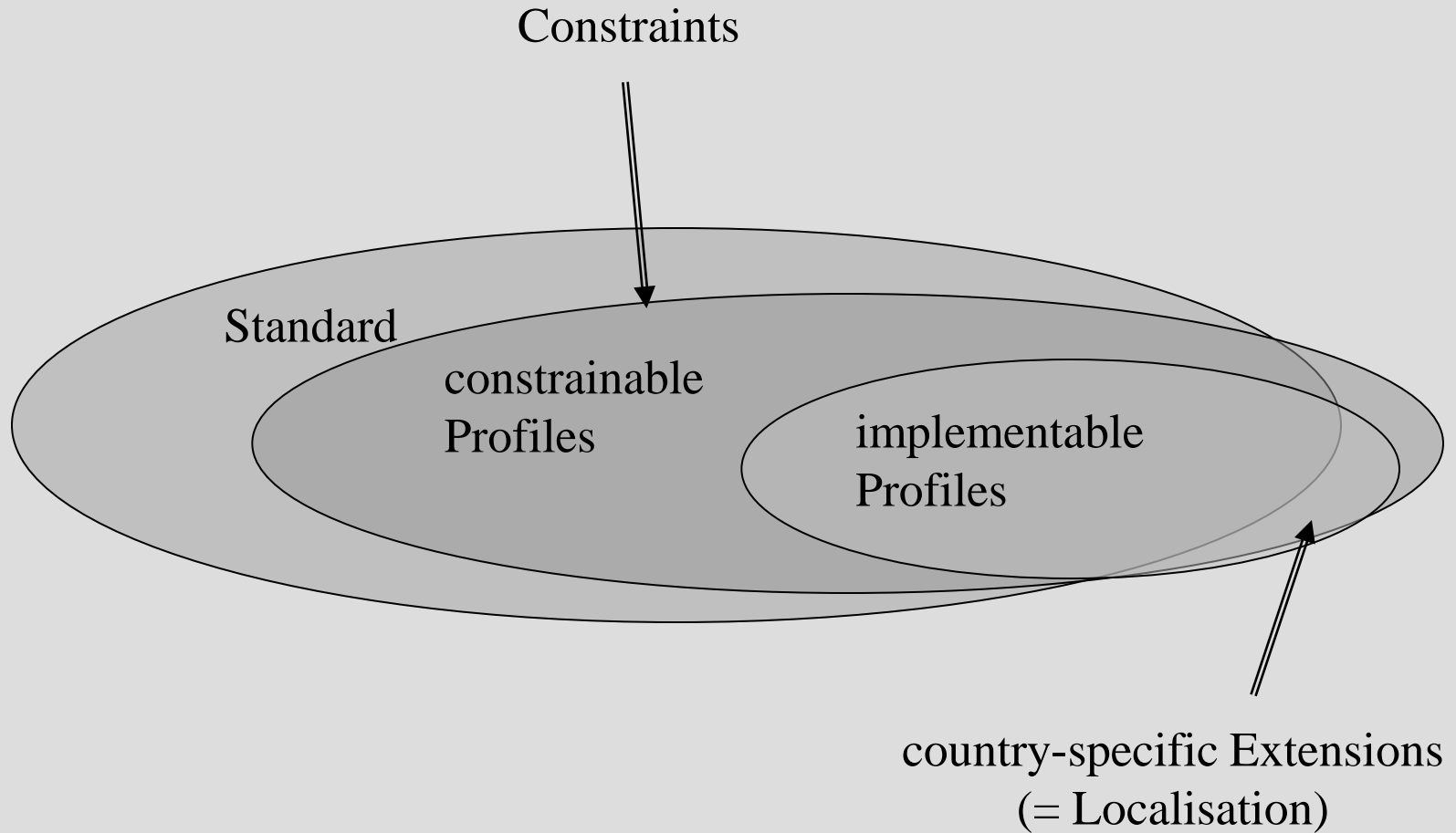
- For Sender + receiver
- For all conformance indicators

Presence Indicator	Test Data Provided	Conformity Assessment Indicator	Actual Data Sent	Conformity Assessment	Comments
R	Valued	Present	Present	Conformant	Affirmative test result
			Not-Present	Non-Conformant	Application does not send the required element when a value is provided.
R	Not-Valued	None—expected behavior is that no message is sent	Present	Non-Conformant	Application sends a value even though they do not have a valid value to send.
			Not-Present	Non-Conformant	Application sends a message with a required element not populated.
			No message sent	Conformant	Application correctly detects that they don't have data for a required value and doesn't send the message.

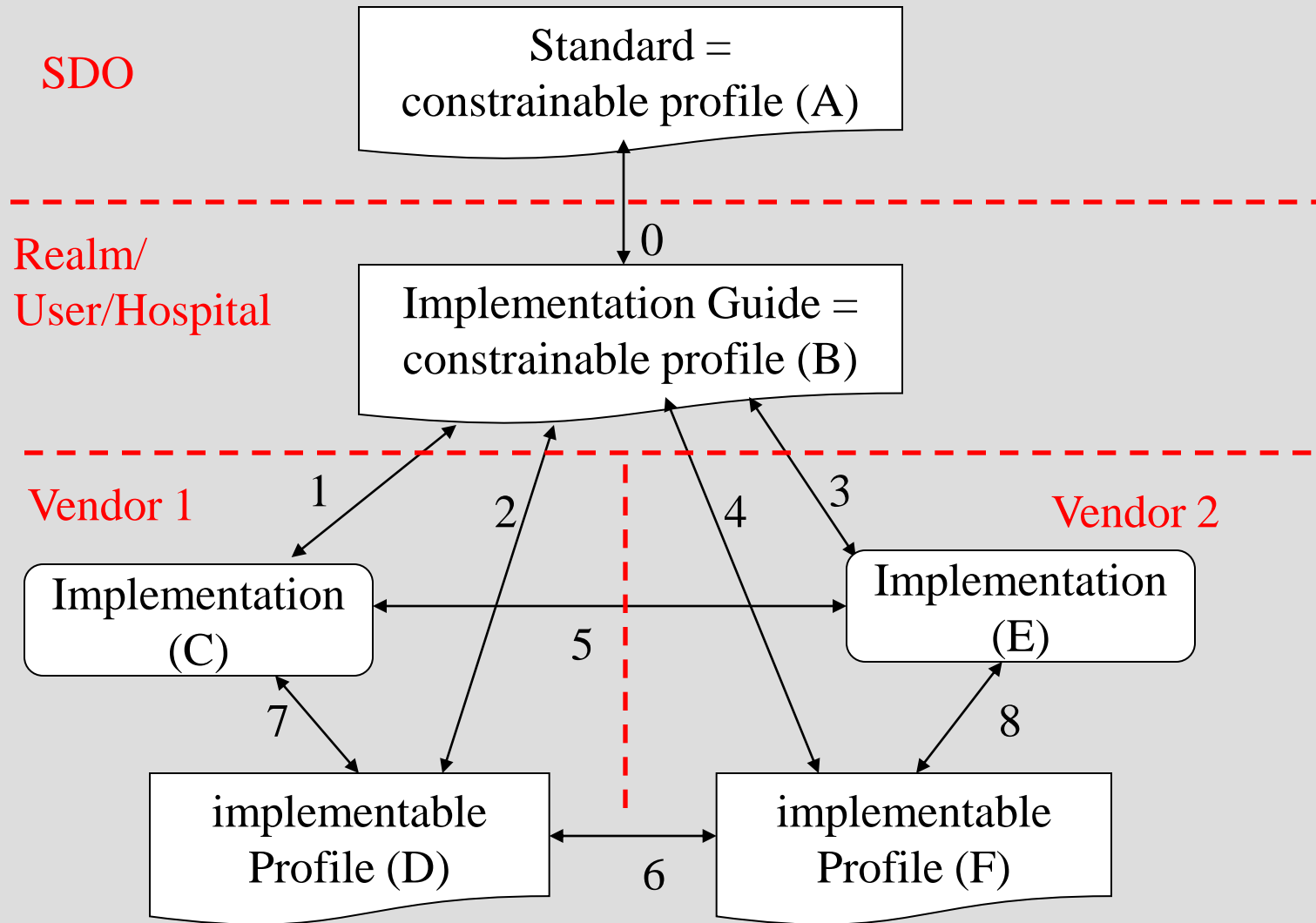
# Profile Hierarchy: Types



# Conformance Criteria



# Relationships



# Documentation Quality Hierarchy

Documentation Quality	Description	Consequences
0	A vendor claims conformance to HL7, but has <u>no proof</u> of his claim.	none
1	A vendor can proof his claim by a <u>documentation</u> of his interface. The format and the contents of this documentation do not matter.	Vendor must provide a document.
2	The documentation he provides fulfils the requirements of a <u>conformance profile</u> as listed in chapter 2B.	Vendor must provide a conformance statement as defined in chapter 2B.
3	The documentation is <u>machine</u> processable.	a computable (constrainable) conformance profile file as defined in
4	The documentation is a conformance profile fulfilling the criteria for <u>implementable</u> profiles, i.e. no options are allowed any more.	file which fulfils the requirements for implementable conformance profile as defined in chapter 2B.
5	The profile is ( <u>successfully</u> ) <u>tested</u> against another profile.	references to the profiles tested against including the results.
6	Another option of testing is horizontally. This way, two (implementable) profiles are <u>tested</u> with a sender/receiver perspective.	Requires references to the profiles tested against mentioning the role (sender/receiver).

# New Segments, new fields, ...

- SGH: segment group header
- SGT: segment group trailer
- ADT messages
  - Add AUT (authorization) and RF1 (referral) segments
- PV1, MRG: allow multiple alternate IDs
- ROL (role) => PRT (participation)
  - ORU, OUL, CSU, ..
  - DFT, MFN, PMU, EHC, ..
- RXA, RXC, RXG: new fields for dispense amount + unit

# Clarification

- MSH: how to use acknowledgment codes, if they are not valued
- Escape sequences to be used in all components
- All tables in chapter 2C
- QBP\_Q13: RDF segment position
  - Still some issues unclear

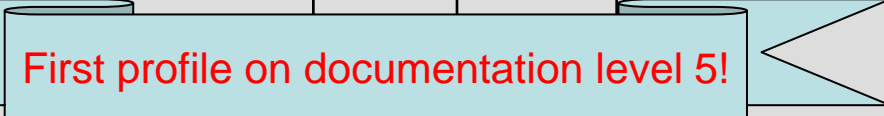
# HL7 v2.5 and IHE ITI PAM

Consistency with  
IHE ITI Pat. Administration Management

# IHE PAM: Interactions

Actor	Opt.	Transaction	Interaction	Direction	Opt.	Actor	Options
<b>Pat. Demographics Supplier</b>	R	Pat. Identity Management	ITI-030	->	R	<b>Pat. Demographics Consumer</b>	<ul style="list-style-type: none"> <li>•merge-Option</li> <li>•link-Option</li> </ul>
<b>Pat. Encounter Supplier</b>	R	Pat. Encounter Management	ITI-031	->	R	<b>Pat. Encounter Consumer</b>	<ul style="list-style-type: none"> <li>•Inpatient/Outpatient Mngmt</li> <li>•Pending Event Mngmt</li> <li>•Advanced Encouter Mngmt</li> <li>•Temporary Patient Transfer Tracking</li> <li>•Historic Movement</li> </ul>

# IHE ITI PAM: Analysis

Msg	Beschreibung	dt. Profil	PAM ITI-030	PAM ITI-031	Kommentare (=ToDo)	Status
ADT^A01	Aufnahme	x		x (all)	Mit diesem Profil wurde begonnen. Es sind Korrekturen sowohl bei PAM als auch bei uns notwendig.	2011-11-18: in Arbeit MSH-4/6: ?? MSH-15/16: CP PID-35-39: conditional ...
 <p><b>First profile on documentation level 5!</b></p>						
ADT^A02	Verlegung	x		x (in-/outpatient, pending)		Analyse fehlt
ADT^A03	Entlassung	x		x (all)		Analyse fehlt
ADT^A04	Registrierung	x		x (all)		Analyse fehlt
ADT^A05	Voraufnahme	x		x (in-/outpatient, pending)		Analyse fehlt
ADT^A06	ambulant -> stationär	x		x (in-/outpatient, pending)		Analyse fehlt
ADT^A07	stationär -> ambulant	x		x (in-/outpatient, pending)		Analyse fehlt
ADT^A08	Update	x		x (all)		Analyse fehlt
ADT^A09		x		x (temporary)		Analyse fehlt
ADT^A10		x		x (temporary)		Analyse fehlt



***Vielen Dank***

***Für Ihre Aufmerksamkeit!***



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