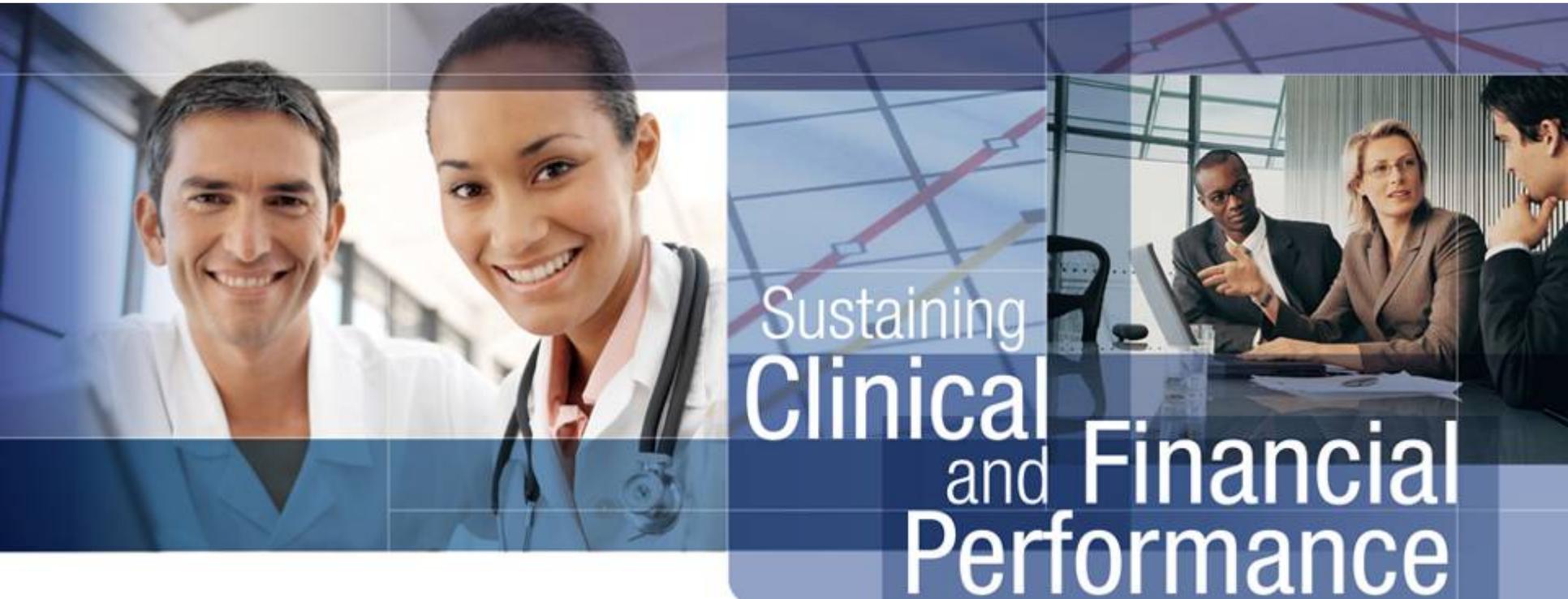


*Descripción del ICD10-PCS para clasificación de procedimientos. JORNADA TÉCNICA SOBRE CIE-10 15 y 16 de Septiembre 2009. Aula Pitaluga. Escuela Nacional de Sanidad*



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# Head Start to Implementation: Preparing Now for ICD-10

- *Reasons for change*
- *Basic structure of ICD-10-CM and ICD-10-PCS*
- *Differences between ICD-9 and ICD-10*
- *Preparing for implementation and change*

## Reasons to Switch to ICD-10

### *ICD-9-CM ...*

- *has been used in the U.S. since 1979*
- *cannot keep up with medical technology*
- *does not allow new codes to be added as needed*

## ICD code set: 1001 uses

- *Set healthcare policy*
- *Determine reimbursement*
- *Conduct research and clinical trials*
- *Measure quality of health care*
- *Evaluate health care providers*
- *Provide treatment options*
- *Track and manage health risk and disease process*

# Development of ICD-10-PCS

## PCS – Procedure Coding System

- Replacement for ICD-9-CM, procedures
- 1998 – first version released by CMS
- Annual updates since that time
- Not in use at this time

The ICD-10-PCS is being developed with the support of the Centers for Medicare and Medicaid Services, under contract Nos. 90-1138, 91-22300 500-95-0005 and HHSM-500-2004-00011C to 3M Health Information Systems.

## Development of the ICD-10 Procedure Coding System (ICD-10-PCS)

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Thelma M. Grant, RHIA, Rhonda R. Butler, CCS, CCS-P

*The International Classification of Diseases 10th Revision Procedure Classification System (ICD-10-PCS) has been developed as a replacement for Volume 3 of the International Classification of Diseases 9th Revision (ICD-9-CM). The development of ICD-10-PCS was funded by the U.S. Centers for Medicare and Medicaid Services (CMS). ICD-10-PCS has a multi-axial seven character alphanumeric code structure that provides a unique code for all substantially different procedures, and allows new procedures to be easily incorporated as new codes. ICD-10-PCS was under development for over five years. The initial draft was formally tested and evaluated by an independent contractor; the final version was released in the Spring of 1998, with annual updates since the final release. The design, development and testing of ICD-10-PCS are discussed.*

The ICD-10-PCS is being developed with the support of the Centers for Medicare and Medicaid Services, under contract Nos. 90-1130, 91-22300 500-05-0005 and 14-HSM-500-2004-00011C to 3M Health Information Systems. Consultation in the development of ICD-10-PCS was provided by Donn G. Duncan, M.D. and Gerard M. Doherty, M.D. The coding staff of the Division of Acute Care, Hospital and Ambulatory Policy Group, Center for Medicare Management of the Centers for Medicare and Medicaid Services, DHHS, provided ongoing review and evaluation during the development of the ICD-10-PCS: Patricia E. Brooks, Ann Bowling Fagan, Amy L. Gruber. A wide range of physician specialty societies, individual clinicians, health care professionals and researchers provided valuable input into the research. The Tables, List of Codes, and Index are computer generated, based on an expert system designed by Yvette Wang, Laurence Gregg, Essex Elin, and David Gannon. Address correspondence and requests for reprints to Richard F. Averill, Director, Clinical Research Department, 3M Health Information Systems, 100 Barre Road, Wallingford, CT 06492. Robert L. Mullin, M.D., Barbara A. Steinbeck, RHIT, Norbert I. Goldfield, M.D., Thelma M. Grant, RHIA, Rhonda R. Butler, CCS, CCS-P, are with 3M Health Information Systems, 3M Health Care. The opinions expressed are solely those of the authors and do not necessarily reflect the views or policy positions of 3M Health Information Systems or the Centers for Medicare and Medicaid Services.

### Introduction

Volume 3 of the *International Classification of Diseases 9th Revision Clinical Modification (ICD-9-CM)* has been used in the U.S. for the reporting of inpatient procedures since 1979. The structure of Volume 3 of ICD-9-CM has not allowed new procedures associated with rapidly changing technology to be effectively incorporated as new codes. As a result, in 1992 the U.S. Centers for Medicare and Medicaid Services (CMS) funded a project to design a replacement for Volume 3 of ICD-9-CM. After a review of the preliminary design, CMS in 1995 awarded 3M Health Information Systems a three-year contract to complete development of the replacement system. The new system is the ICD-10 Procedure Coding System (ICD-10-PCS).

The development of ICD-10-PCS had as its goal the incorporation of four major attributes:

#### Completeness

There should be a unique code for all substantially different procedures. In Volume 3 of ICD-9-CM, procedures on different body parts, with different approaches, or of different types are sometimes assigned to the same code.

#### Expandability

As new procedures are developed, the structure of ICD-10-PCS should allow them to be easily incorporated as unique codes.



# I-10 PCS: Essential Characteristics

## *Seven Character Alphanumeric Code*

- *Digits 0 - 9*
- *Letters A-H, J-N, P-Z*

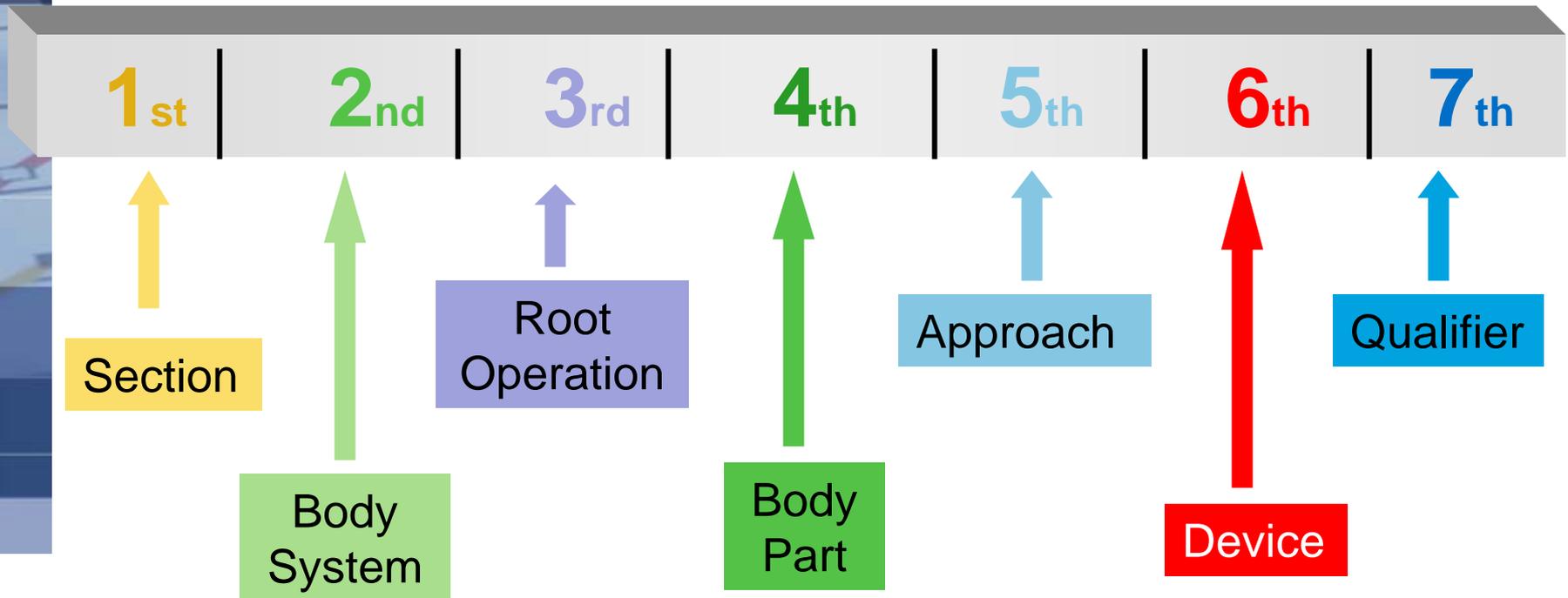
Source: 3M Health Information Systems



## I-10 PCS: Essential Characteristics

- *Completeness: unique code for every distinct procedure*
- *Expandability: easily adapts to changes in technology and clinical practice*
- *Standardized terminology: terms have a single precise meaning*
- *Multi axial: fixed order, each character functions independently*

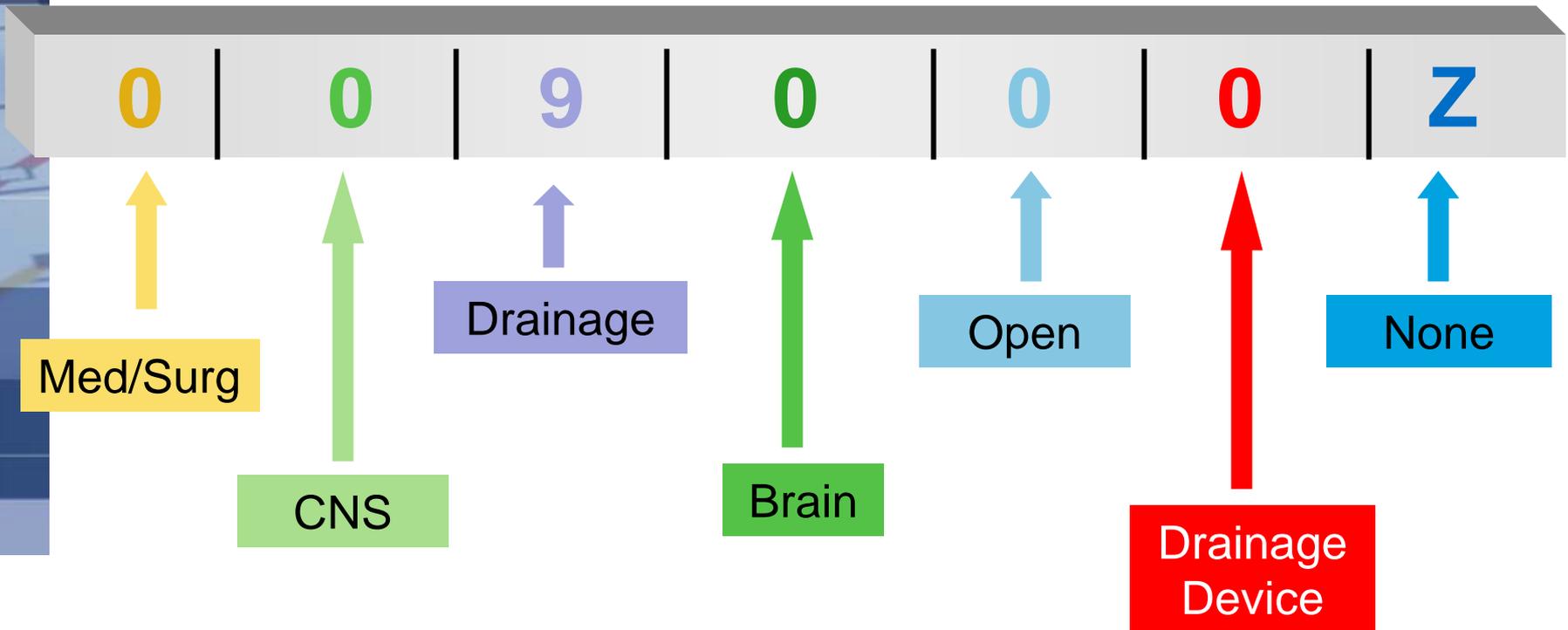
# PCS Character Assignment: Medical and Surgical Procedures



Source: 3M Health Information Systems



# PCS Codes: Each Code Tells a Story



Source: 3M Health Information Systems



## Section (1<sup>st</sup> character)

**1<sup>st</sup>**

**2<sup>nd</sup>**

**3<sup>rd</sup>**

**4<sup>th</sup>**

**5<sup>th</sup>**

**6<sup>th</sup>**

**7<sup>th</sup>**

0 *Medical and Surgical*

1 *Obstetrics*

2 *Placement*

3 *Administration*

4 *Measurement and Monitoring*

5 *Imaging*

6 *Nuclear Medicine*

7 *Radiation Oncology*

8 *Osteopathic*

9 *Physical Rehabilitation and  
Diagnostic Audiology*

B *Extracorporeal  
Assistance and Performance*

C *Extracorporeal Therapies*

D *Laboratory*

F *Mental Health*

G *Chiropractic*

H *Miscellaneous*

J *Substance Abuse Treatment*

# Body System (2<sup>nd</sup> character)

1<sup>st</sup>

2<sup>nd</sup>

3<sup>rd</sup>

4<sup>th</sup>

5<sup>th</sup>

6<sup>th</sup>

7<sup>th</sup>

- Identifies general area of procedure

*Examples:*

*1 Peripheral Nervous System*

*2 Heart and Great Vessels*

*B Respiratory System*

*C Mouth and Throat*

*D Gastrointestinal System*

# Root Operation (3<sup>rd</sup> character)

1<sup>st</sup>

2<sup>nd</sup>

3<sup>rd</sup>

4<sup>th</sup>

5<sup>th</sup>

6<sup>th</sup>

7<sup>th</sup>

- Identifies essential surgical action performed

Examples in Medical/Surgical:

*0 Alteration*

*4 Creation*

*1 Bypass*

*5 Destruction*

*2 Change*

*6 Detachment*

*3 Control*

*7 Dilation*



## Body Part (4<sup>th</sup> character)

1<sup>st</sup>      2<sup>nd</sup>      3<sup>rd</sup>      4<sup>th</sup>      5<sup>th</sup>      6<sup>th</sup>      7<sup>th</sup>

- Describes specific body part on which the procedure was performed
  - *Body parts include lesions, polyps, etc. found in/on the body part*
- Example:      body system D, Gastrointestinal

*0 Esophagus                      B Ileum*

*1 Esophagus, Upper      J Appendix*

*5 Upper Intestine              W Peritoneum*

## Approach (5<sup>th</sup> character)

1<sup>st</sup>

2<sup>nd</sup>

3<sup>rd</sup>

4<sup>th</sup>

5<sup>th</sup>

6<sup>th</sup>

7<sup>th</sup>

- Indicates the method used to reach the body part
- 13 different approaches made up of three basic types, plus the external approach:
  - *Open => Open intraluminal*
  - *Percutaneous=> Percutaneous intraluminal*
  - *Transorifice=> Transorifice intraluminal*

## Device (6<sup>th</sup> character)

1<sup>st</sup>

2<sup>nd</sup>

3<sup>rd</sup>

4<sup>th</sup>

5<sup>th</sup>

6<sup>th</sup>

7<sup>th</sup>

- Describes a device placed during the procedure
- Applies only to devices that remain after the procedure is completed
  - *Grafts and prostheses (skin graft, joint prosthesis)*
  - *Implants (IUD, brachytherapy seeds)*
  - *Simple/Mechanical Appliances (tracheostomy tube, VAD)*
  - *Electronic Appliances (pacemakers, infusion pumps)*



## Qualifier (7<sup>th</sup> character)

1<sup>st</sup>      2<sup>nd</sup>      3<sup>rd</sup>      4<sup>th</sup>      5<sup>th</sup>      6<sup>th</sup>      7<sup>th</sup>

- Unique meaning for different root operations

Examples:

- *Genetic compatibility of transplant*
- *Biopsy (diagnostic excision)*
- *Destination site for a bypass*
- *Original procedure being revised*

# Number of PCS codes by section= 86,617

▪ Medical and Surgical	77,242
▪ Obstetrics	331
▪ Placement	864
▪ Administration	1,401
▪ Measurement and Monitoring	290
▪ Extracorporeal Assistance and Performance	26
▪ Extracorporeal Therapies	34
▪ Osteopathic	100
▪ Other Procedures	21
▪ Chiropractic	90
▪ Imaging	2,466
▪ Nuclear Medicine	458
▪ Radiation Oncology	1,823
▪ Rehabilitation and Diagnostic Audiology	1,382
▪ Mental Health	30
▪ Substance Abuse Treatment	59



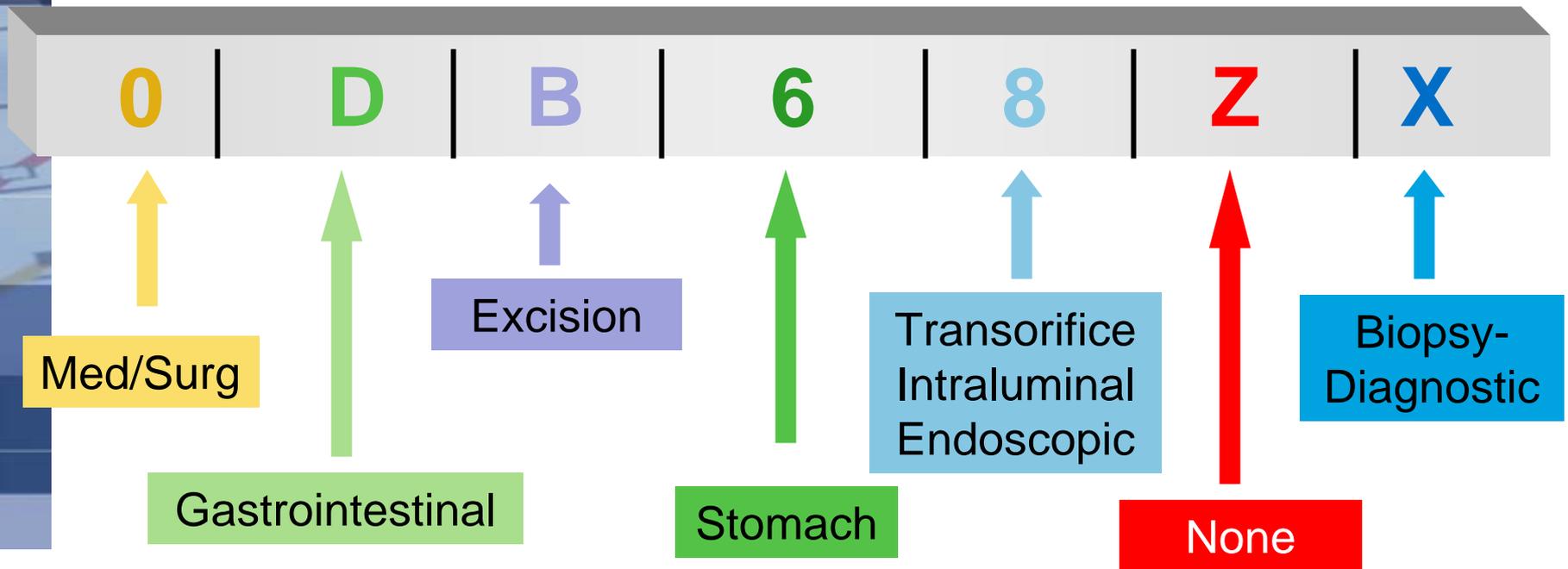
## I-10-PCS Book Format

- *Matrix and index*
- *Index provides first three or four characters*
- *Matrix must be used to build valid code*
- *No eponyms are included*

<p>0: Medical and Surgical Section  D Gastrointestinal System  B: EXCISION: Cutting out or off, without replacement, a portion of a body part.</p>			
1 Esophagus, upper 2 Esophagus, middle 3 Esophagus, lower 4 Esophagogastric junction 6 Stomach 7 Stomach, pylorus 9 Duodenum A Jejunum B Ileum C Ileocecal valve H Cecum J Appendix K Ascending Colon L Transverse Colon M Descending Colon N Sigmoid Colon P Rectum	0 Open 1 Open Intraluminal 2 Open Intraluminal Endoscopic 3 Percutaneous 4 Percutaneous Endoscopic 5 Percutaneous Intraluminal 6 Percutaneous Intraluminal Endoscopic 7 Transorifice Intraluminal 8 Transorifice Intraluminal Endoscopic	Z None	X Diagnostic Z None
Q Anus	0 Open 1 Open Intraluminal 2 Open Intraluminal Endoscopic 3 Percutaneous 4 Percutaneous Endoscopic 5 Percutaneous Intraluminal 6 Percutaneous Intraluminal Endoscopic 7 Transorifice Intraluminal 8 Transorifice Intraluminal Endoscopic Z None	Z None	X Diagnostic Z None
R Anal Sphincter S Greater Omentum T Lesser Omentum V Mesentery W Peritoneum	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	Z None	X Diagnostic Z None

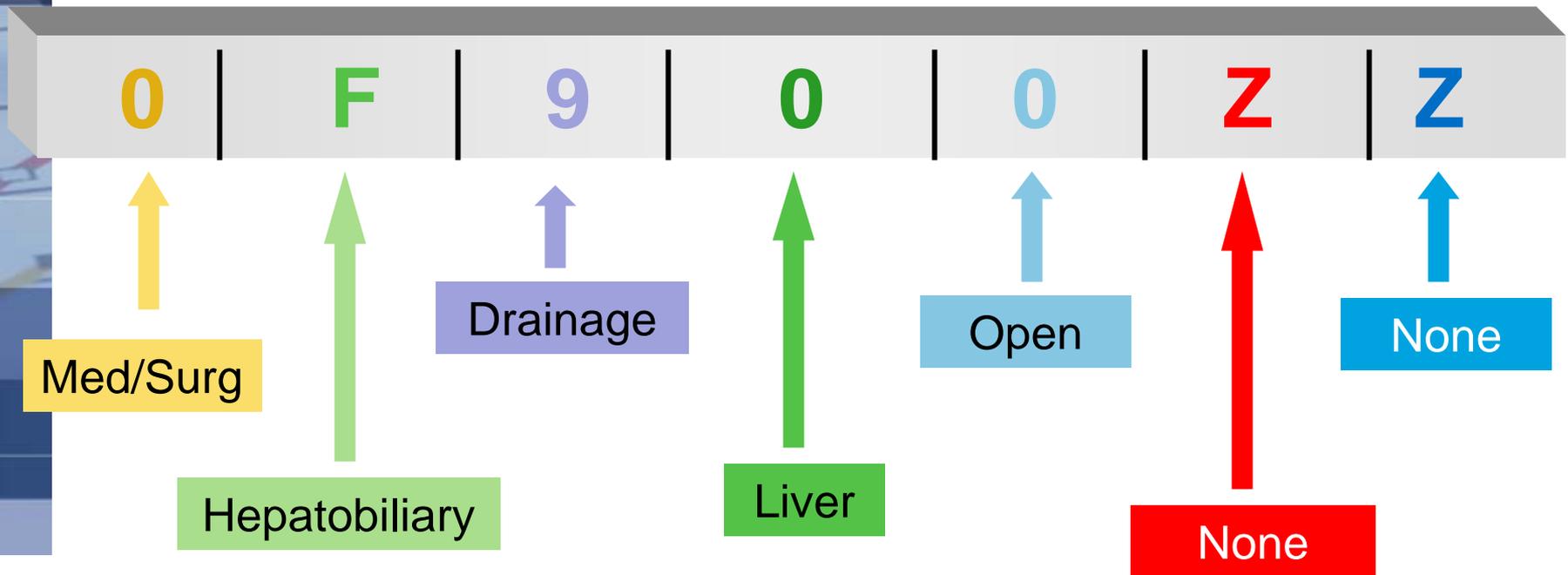


# PCS Code Example: “EGD with biopsy of stomach”



Source: 3M Health Information Systems

# PCS Code Example: “Drainage of liver, open”



Source: 3M Health Information Systems

## I-9-CM to I-10-PCS: “Excisional debridement of skin”

<u>ICD-9-CM</u>	<u>ICD-10-PCS</u>	<u>Description</u>
86.22	0HBJZZZ	Excision, skin right upper leg
86.22	0HBLZZZ	Excision, skin right lower leg
86.22	0HB9ZZZ	Excision, skin buttock
86.2	0HBPZZ	Excision, skin left foot

Source: 3M Health Information Systems



## ICD-9-CM Angioplasty

1 code (39.50)

## ICD-10-PCS Angioplasty codes

854 codes , specifying body part, approach, and device, including:

047K04Z – Dilation of right femoral artery with drug-eluting intraluminal device, open approach

047K0DZ – Dilation of right femoral artery with intraluminal device, open approach

047K0ZZ – Dilation of right femoral artery, open approach

047K34Z – Dilation of right femoral artery with drug-eluting intraluminal device, percutaneous approach

047K3DZ – Dilation of right femoral artery with intraluminal



## ICD-9-CM : Mechanical complication of other vascular device, implant and graft

- *1 code (996.1)*

## ICD-10-CM : Mechanical complication of other vascular grafts

- *156 codes, including:*
  - » T82.310 – Breakdown (mechanical) of aortic (bifurcation) graft (replacement)
  - » T82.311 – Breakdown (mechanical) of carotid arterial graft (bypass)
  - » T82.312 – Breakdown (mechanical) of femoral arterial graft (bypass)
  - » T82.318 – Breakdown (mechanical) of other vascular grafts
  - » T82.319 – Breakdown (mechanical) of unspecified vascular grafts
  - » T82.320 – Displacement of aortic (bifurcation) graft (replacement)
  - » T82.321 – Displacement of carotid arterial graft (bypass)
  - » T82.322 – Displacement of femoral arterial graft (bypass)
  - » T82.328 – Displacement of other vascular graft



## HIM: Implementation Issues

- Evaluate education needs:
  - *Expertise in medical terminology*
  - *Detailed knowledge of anatomy*
  - *Better comprehension of operative reports*
  - *Increased collaboration with medical staff*
  - *Comprehension, interpretation and application of ICD-10-PCS definitions*

Source: 3M Health Information Systems

## HIM: Implementation Issues

- Clinical Impact
  - *Physician Documentation*
    - *Is the key to appropriate coding*
    - *Has been a problem since 1900s*
    - *Will need to meet expanded requirements*

## HIM: Implementation Issues

- Single most important step to take in determining weakness:
  - *Gap analysis of current documentation and coding practices*
- Audit for weaknesses in:
  - *Coder knowledge of anatomy and surgical procedures*
  - *Physician documentation*

Source: 3M Health Information Systems

## ICD-10-PCS resources

- Access ICD-10-PCS on the CMS website:  
<http://www.cms.gov/paymentsystems/icd9/icd10.asp>
- 3M <http://www.3m.com/us/healthcare/his/ICD-10.jhtml>

*Thank you!*

Questions/Comments?

