### Design Workshop

# 4-Step Dimensional Design Process

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#### 1. Identify the Business Process

- Source of "measurements"
- e.g. taking orders, invoicing, receiving payments, handling service calls, etc.

#### 2. Identify the Grain

- What does 1 row in fact table represent/mean?
- Lowest atomic grain delivers most flexibility

#### 3. Identify the Dimensions

Descriptive context, true to the grain

#### 4. Identify the Facts

Numeric additive measurements, true to the grain

# 4-Step Dimensional Design Process: An Example

- 1. Identify Business Process
  - Claim Billing
- 2. Identify the Grain
  - A line item of a doctor's bill
- 3. Identify Dimensions
  - Date (of treatment)
  - Doctor (maybe called "provider")
  - Patient
  - Procedure
  - Primary Diagnosis

## 4-Step Dimensional Design Process: An Example (Cont'd)

#### 3. Identify Dimensions (cont'd)

- Location (presumably the doctor's office)
- Billing Organization (an organization the doctor belongs to)
- Responsible Party (either the patient, or the patient's legal guardian)
- Primary Payer (often an insurance plan)
- Secondary Payer (maybe the responsible party's spouse's insurance plan) and quite possibly others.

#### 4. Identify the Facts

Billed Amount

### Design Workshop #1

Complete the 4-step process for designing dimensional models.

- Business Process:
- > Grain:
- > Dimensions:
- > Facts:

Draw dimensional star schema

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TOTAL		274
AMOUNT TENDERED		
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ITEM COUNT	6	
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