Saudi Billing System:

designing a standardized health insurance billing system in Saudi Arabia based on ICD-10 AM/ACHI classification

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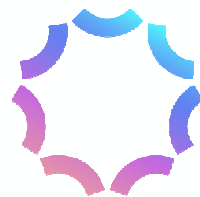
ضمان
مجلس الضمان الصحي
Council of Health Insurance

2

- CHI's ambition is to standardize the use of clinical standards across the health insurance market in KSA

VISION رؤيـــة
2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

Health Sector
Transformation
Program

nphies

Slide 1

Health Sector Transformation Program — VISION 2030 KINGDOM OF SAUDI ARABIA

#	
1	Facilitate access to healthcare services
2	Improve the quality and efficiency of health services
3	Promote prevention of health risks
4	Enhance traffic safety

Foundational principles

$$\frac{\text{OUTCOMES}}{\text{COSTS}}$$

SEGMENT-SPECIFIC INTERVENTIONS · POPULATION SEGMENTS

Slide 2
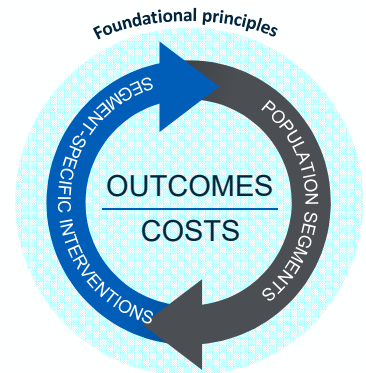
- # Insurance Services
- # Old State

- Providers submit financial/administrative transactions directly to payers
- Patient data is only in the Provider's EMR and cannot be shared
- Regulatory bodies have limited insight into transactions, and are challenged to enforce rules and regulations

HIC/TPA

Hospital

Eye Clinic

Diagnosis Centre

Medical test laboratory

Slide 5
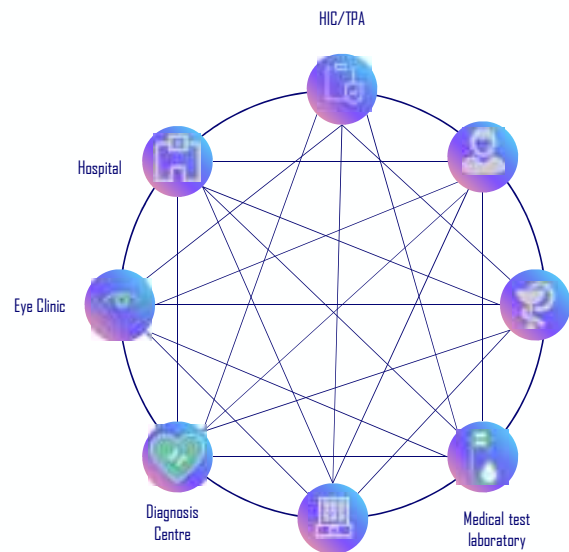
- Insurance Services
- Current State

- Providers submit financial/administrative transactions to a single enterprise entity
- Physicians have a digital unified 360 view of patient health record including all encounters from facilities a patient has visited
- Regulatory bodies can set policies and monitor adherence across facilities and payers

HIC/TPA
Patient
One Doctor Clinic
Insurance Services
Pharmacy
Poly Clinic
Medical test laboratory
Hospital
Diagnosis Center

Slide 6

Final accepted Clinical standards

The approved clinical standards by SHC

Clinical Classifications

Procedures / Health interventions (in-patient)	Diagnosis Codes	Diagnosis Related Groupings - DRGs	Demographics/ Administrative Coding)
ACHI Tenth Edition	ICD-10-AM/ACHI/ACS Tenth Edition	AR-DRG version 9.0 Grouper	Saudi Health Data Dictionary (SHDD), V.2
Medical devices	Emergency Department Principal Diagnosis	Terminologies & Standards	Out-patient / Pharmacy consultation
SFDA, GMDN	ICD-10-AM/ACHI/ACS Tenth Edition MDC and URG	SNOMED CT	Modified MBS
Imaging Procedures	Laboratory tests,) observations and Blood Bank products)	(Oral Health)	Functional Assessments
RELMA Version 6.24	LOINC Version 2.65	ADA	International Classification for Functioning, Disability and Heath (ICF), (FIM)
Packaged pharmaceuticals	Ambulance and transportation services	Cause of Death / Morbidity	Units of measures
SFDA (GTIN)	Modified MBS	ICD-10 WHO	THE UNIFIED CODE FOR UNITS OF MEASURE (UCUM) revision 2.1

Saudi (CCHI) Billing System

The development of the new billing system

Feature	MBS	ACHI
Number of codes (approximate)	6,000	6,000
Regularity of updates	Annual	Every two years
Need for specialized training	No	Yes
Licensing costs	No	Yes
Availability of pricing relativities	Yes	No

Procedure/ service	MBS	ACHI
Surgery, including anesthesia	✔	✔
Non-operating room procedures (e.g. endoscopies)	✔	✔
Dentistry	✔	✔
Medicine (therapeutic interventions, pharmacotherapy incl. chemotherapy, radiotherapy, dialysis)	✔	✔
Evaluation and management (i.e. visit/ professional attendance codes)	✔	✖
Allied health	✔	✔
Radiology	✔	✔
Pathology and laboratory	✔	✖

Saudi (CCHI) Billing System

Methodology

Facility Type	Monthly OP Visits	Monthly Dental Visits	Totals
Total Cases	1,924,123	306,894	2,231,017
Sample Private	521,589	60,999	582,588
Sample Public	4,237	78	4,315
Sample Total	525,826	61,077	586,903
Coding Target	20%	5%	
Total for Coding	105,165	3,054	108,219
% Of Total	5.5%	1.0%	4.85%

Region	Monthly OP Visits	Monthly Dental Visits
الباحة - Baha	826	152
الجوف - Al Jouf	1,372	200
الحدود الشمالية - North	1,837	143
الرياض - Riyadh	173,139	15,985
الشرقية - Sharqiyya	133,969	18,906
القصيم - Al Qassim	8,344	1,085
المدينة المنورة - Madinah	20,686	4,175
تبوك - Tabuk	10,783	1,124
جيزان - Jezan	12,109	808
حائل - Ha'el	1,967	284
عسير - Asir	9,521	670
مكة المكرمة - Makkah	146,369	16,690
نجران - Najran	4,904	856
Grand Total	525,826	61,077

Saudi (CCHI) Billing System

Methodology

SAMPLE DATA
■ No. of Claims   ■ No. of Activities

	RECEIVED DATA	PLANNED	ACTUAL SAMPLE
No. of Claims	1,387,885	105,069	165,742
No. of Activities	4,925,003	315,208	447,503
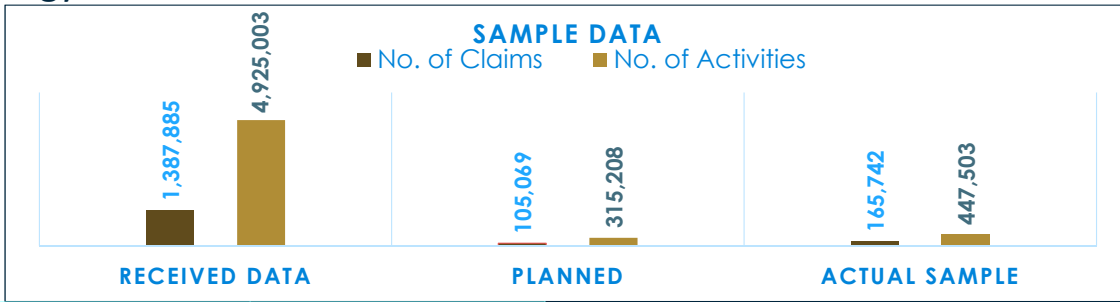
Records Received	Total
No. of Cases	1,387,885
No. of Services	4,925,003

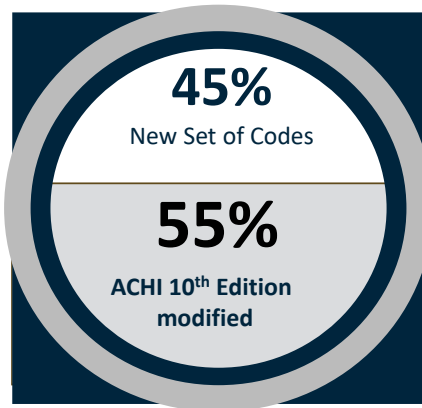| Coded Sample	Totals
No. of Cases	165,742
No. of Services	447,503

- Sample size was derived to arrive at a top 20% of Providers responsible for 80% of volume.

- All cases were coded twice using the CPT and ACHI classification systems

9

Saudi (CCHI) Billing System

Result

ACHI 10th Edition
100%
content

IP use only, Key services missing, Partially compatible with IP Billing

45%
New Set of Codes

55%
ACHI 10th Edition modified

Original Chapters modified, New Chapters added, Fully Compatible with Billing (IP/OP/Ambulance)

100%
Fully-Integrated and Coherent Billing System for all Healthcare Services

10

Saudibilling system

Therefore, the new Saudibilling system is published on CCHI website including a comprehensive guideline

The SaudiBS can be used for most invoices and is supplemented by additional existing code sets

Area	Code set
1 Diagnosis codes	ICD-10-AM Tenth Edition
2 In-patient procedures	**CCHI billing system**
3 Out-patient procedures	**CCHI billing system**
4 Medical devices	GMDN
5 In-patient dental	**CCHI billing system**
6 Out-patient dental	ADA
8 Laboratory tests	**CCHI billing system**
9 Imaging procedures	**CCHI billing system**
10 Packaged pharmaceuticals	GTIN
11 Transportation services	**CCHI billing system**

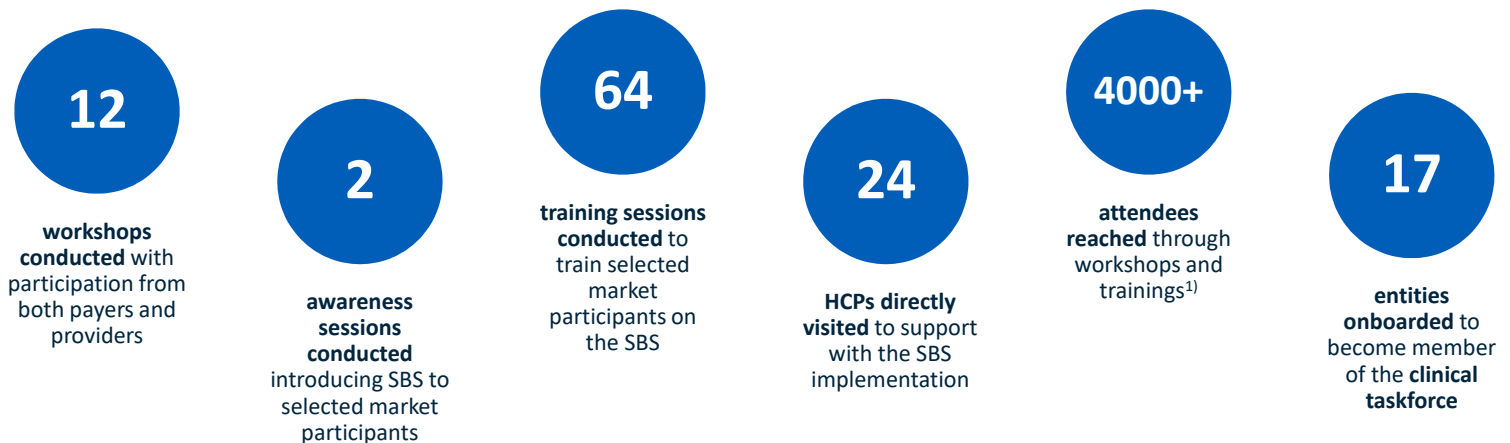*initially published on CCHI website on 07/06/2020*

The entire code set as well as a guideline is freely accessible on CCHI website

11

Key figures of market engagement

Overall, comprehensive market feedback was incorporated during the development of the Saudi billing system

12
workshops conducted with participation from both payers and providers

2
awareness sessions conducted introducing SBS to selected market participants

64
training sessions conducted to train selected market participants on the SBS

24
HCPs directly visited to support with the SBS implementation

4000+
attendees reached through workshops and trainings[1]

17
entities onboarded to become member of the **clinical taskforce**

1) Attendees might have attended several workshops and trainings

12

شكراً لكم