



CRS Childhood Immunizations Measures

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CRS GPRA Measure

- User Population patients ages 19-35 months active in IMM with the 4:3:1:3:3 combination, including refusals, contraindications, and evidence of disease.
 - Beginning in 2007, the GPRA rate will be reported by CRS vs. the Immunization Program
 - The 2006 rate reported by CRS 78% (not reported for GPRA)



CRS Denominators

- Active Clinical patients ages 19-35 months as of the end of the Report Period (7-23 months at beginning of the Report Period)
 - Active Clinical defined as
 - Must be Indian/Alaska Native, based on Beneficiary classification 01, **and**
 - Must reside in a community specified in the site's GPRA community taxonomy, **and**
 - Must be alive on last day of Report Period, **and**
 - Must have two visits to defined medical clinics in the past 3 years. One of those visits must to be any of the following: 01 General, 06 Diabetic, 10 GYN, 12 Immunization, 13 Internal Med, 16 Obstetrics, 20 Pediatrics, 24 Well Child, 28 Family Practice, 57 EPSDT, 70 Women's Health, 80 Urgent, 89 Evening. Second visit may be to larger list of clinics (see CRS User Manual)

CRS Denominators (cont'd)

- User Population patients ages 19-35 months as of the end of the Report Period
 - User Population defined as
 - Must be Indian/Alaska Native, based on Beneficiary classification 01, **and**
 - Must reside in a community specified in the site's GPRA community taxonomy, **and**
 - Must be alive on last day of Report Period, **and**
 - Must have one visit to any clinic in the past 3 years
 - Only included in the Selected Measures (Local) Reports



CRS Denominators (cont'd)

- GPRA: User Population patients ages 19-35 months as of the end of the Report Period who are active in the Immunization Package (IMM)
 - Must meet the User Population definition (see previous slide), **and**
 - Must be active in IMM as of end of the Report Period, which is checked each time the report is run. Example:
 - Report Period: July 1, 2006 – June 30, 2007
 - Immunization Package Status: Inactive
 - Inactive Date: May 1, 2007
 - Patient is not included in this denominator

CRS Denominators (cont'd)

- **GPRR Denominator (cont'd)**
 - Since there is no way to determine when a patient became active in IMM, data is not reported for the Previous Year or Baseline Years for this denominator
 - Reporting facility must be using IMM for this denominator; otherwise, will have zero patients in the denominator



CRS Numerators

- Most CRS numerators include patients with the vaccine, contraindication, evidence of disease, and/or refusal
 - Refusals include both Parent and Patient Refusals entered into IMM and refusals for service (REF) entered into PCC
 - For immunizations where required number of doses is >1 (e.g. 3 Hepatitis B), only one refusal is necessary to be counted in the numerator
 - Contraindications include
 - IMM contraindications
 - Not medically indicated (NMI) refusals entered into PCC
 - Diagnosis codes for specific conditions (e.g. HIV)



CRS Numerators

- Most CRS numerators include two sub-numerators
 - Patients with documented REF refusal in PCC or Parent or Patient refusal in the IZ program
 - Patients with (1) evidence of the disease, (2) a contraindication, or (3) a documented NMI (not medically indicated) refusal



CRS Numerators (cont'd)

Childhood Immunizations Numerator	National GPRA Report?	Selected Measures (Local) Report?
GPRA: 4:3:1:3:3	Y	Y
4 DTaP	Y	Y
3 Polio	Y	Y
1 MMR	Y	Y
3 Hib	Y	Y
3 Hepatitis B	Y	Y
1 Varicella	N	Y
4 Pneumococcal	N	Y

CRS Numerators (cont'd)

Numerator	National GPRA Report?	Selected Measures (Local) Report?
With All Immunizations (4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 Hepatitis B, 1 Varicella, and 4 Pneumococcal)	N	Y
Immunization Program Numerator: With All Immunizations NOT including evidence of disease, contraindications, or refusals	N	Y
Immunization Program Numerator: 4:3:1:3:3 NOT including evidence of disease, contraindications, or refusals	N	Y

CRS Logic

- Vaccines must be at least 10 days apart. Vaccines documented on dates within 10 days of each other are considered as the same immunization.



CRS Logic (cont'd)

- CRS dosage logic

- 4 doses of DTaP: 1) 4 DTaP/DTP/Tdap; 2) 1 DTaP/DTP/Tdap and 3 DT/Td; 3) 1 DTaP/DTP/Tdap and 3 each of Diphtheria and Tetanus; 4) 4 DT and 4 Pertussis; 5) 4 Td and 4 Pertussis; or 6) 4 each of Diphtheria, Tetanus, and Pertussis
- 3 doses of Polio: 1) 3 OPV; 2) 3 IPV; or 3) combination of OPV & IPV totaling 3 doses
- 1 dose of MMR: 1) MMR; 2) 1 M/R and 1 Mumps; 3) 1 R/M and 1 Measles; or 4) 1 each of Measles, Mumps, and Rubella
- 3 doses of Hep B OR 2 doses IF documented with CPT 90743
- 3 doses of HIB
- 1 dose of Varicella
- 4 doses of Pneumococcal

CRS Reports & Patient Lists

- **National GPRA Report Patient Lists**
 - Active Clinical with 4:3:1:3:3
 - Active Clinical without 4:3:1:3:3
 - User Pop Immunization Package with 4:3:1:3:3
 - User Pop Immunization Package without 4:3:1:3:3
 - Active Clinical Pts not in Immunization Package denominator
- **Selected Measures (Local) Report Patient List**
 - Patients in any of the denominators with received vaccines listed
- All patient lists show the vaccines the patients had if they had the required number of doses for the vaccine



Sample National GPRA Report

935									
936		REPORT	%	PREV YR	%	CHG from	BASE	%	CHG from
937		PERIOD		PERIOD		PREV YR %	PERIOD		BASE %
938									
939	Active Clinical Pts 19-35 months	51		39			55		
940									
941	# w/ 4:3:1:3:3 combo or w/ Dx/ Contraind/ Refusal	11	21.6	4	10.3	+11.3	6	10.9	+10.7
942									
943	# w/ 4 doses DTaP or w/ Dx/ Contraind/Refusal	14	27.5	4	10.3	+17.2	9	16.4	+11.1
944									
945	# w/ 3 doses Polio or w/ Dx/ Contraind/Refusal	19	37.3	11	28.2	+9.0	13	23.6	+13.6
946									
947	# w/ 1 dose MMR or w/ Dx/Contraind/ Refusal	18	35.3	11	28.2	+7.1	19	34.5	+0.7
948									
949	# w/ 3 doses HIB or w/Dx/Contraind/ Refusal	17	33.3	9	23.1	+10.3	14	25.5	+7.9
950									
951	# w/ 3 doses Hep B or w/ Dx/Contraind/ Refusal	17	33.3	10	25.6	+7.7	14	25.5	+7.9
952									
953	Active Imm Pkg Pts 19-35 months (GPRA)	27		0			0		
954									



Sample Patient List

	A	B	C	D	E	F	G
1	UP=User Pop; AC=Active Clinical; AD=Active Diabetic;						
2	AAD=Active Adult Diabetic; PREG=Pregnant Female;						
3	IMM=Active IMM Pkg Pt; IHD=Active Ischemic Heart Disease						
4							
5	Childhood Immunizations: List of patients 19-35 months with IZ, if any.						
6	If a patient did not have all doses in a multiple dose vaccine, the IZ						
7	will not be listed. For example, if a patient only had 2 DTaP, no IZ will						
8	be listed for DTaP.						
9							
10	PATIENT NAME	HRN	COMMUNITY	SEX	AGE	DENOMINATOR	NUMERATOR
11	-----						
12	PATIENT, FIRST	000001	SAMPLE #1	F	0	UP;AC;IMM	4 Dtap/Dtp;3 OPV;MMR;3 HIB;3 HEP;vari
13	PATIENT, SECOND	000002	SAMPLE #1	F	1	UP;AC	
14	PATIENT, THIRD	000003	SAMPLE #1	F	1	UP	
15	PATIENT, FOURTH	000004	SAMPLE #1	M	0	UP;AC;IMM	4 Dtap/Dtp;3 OPV;MMR;3 HIB;3 HEP;vari
16	PATIENT, FIFTH	000005	SAMPLE #1	M	0	UP;AC;IMM	;vari
17	PATIENT, SIXTH	000006	SAMPLE #1	M	0	UP;AC;IMM	
18	PATIENT, SEVENTH	000007	SAMPLE #1	M	1	UP	
19	PATIENT, EIGHTH	000008	SAMPLE #1	M	1	UP;AC;IMM	
20	PATIENT, NINTH	000009	SAMPLE #1	M	1	UP;AC;IMM	4 Dtap/Dtp;3 OPV;MMR;3 HIB;3 HEP;vari
21	PATIENT, TENTH	000010	SAMPLE #2	F	0	UP;AC	
22	PATIENT, ELEVENTH	000011	SAMPLE #3	F	1	UP;AC;IMM	4 Dtap/Dtp;3 OPV;MMR;3 HIB;3 HEP;vari
23	PATIENT, TWELFTH	000012	SAMPLE #3	F	1	UP;AC	
24	PATIENT, THIRTEENTH	000013	SAMPLE #3	M	0	UP;AC;IMM	;3 OPV;MMR;3 HIB;3 HEP;vari
25	PATIENT, FOURTEENTH	000014	SAMPLE #3	M	0	UP;AC;IMM	;3 OPV
26	PATIENT, FIFTEENTH	000015	SAMPLE #4	F	0	UP;AC;IMM	4 Dtap/Dtp;3 OPV;MMR;3 HIB;3 HEP;vari
27							

Potential Reasons for Differences Between CRS and IMM Reports

- CRS requires patient's age to be 7-23 months at a fixed date (beginning of the Report Period), which makes patient 19-35 months at end of Report Period. IMM uses a different cohort of children for each quarter (i.e. as of today, how many are between 19-35 months old?).
- GPRA community taxonomy: was the same used for both reports?
- Patient population: were AI/AN patients only used for both reports?
- Are there inactive patients in IMM that should be changed to active?
- IMM does not require 10 days (or any days) apart for series of vaccines, whereas CRS does



CRS Adolescent Immunizations Measures

- Included only in the Selected Measures (Local) Reports
 - Denominator: Active Clinical patients age 13
 - Numerators
 - 2 MMR, 3 Hepatitis B, 1 Varicella
 - 2 MMR
 - 3 Hepatitis B
 - 1 Varicella
 - Uses same logic as Childhood Immunizations measures
 - New denominators & numerators to be added in CRS 8.0



For more info, visit:

www.ihs.gov/cio/crs



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