



Operational Definition

MEASUREMENT: 3rd Next Available Appointment

I. Description and Rationale

This measure answers the question:

How long do patients have to wait for a new visit appointment to a specialty or primary care outpatient clinic?

3rd Next Available Appointment is a core business measure for outpatient access. It is measured as the length of time in calendar days between the day a patient makes a call for an appointment with a clinical care provider and the third available appointment. This measure does not restrict to a certain campus or provider since it measures availability regardless of particular patient preferences.

Access is tracked for new patients because a primary concern of the CCHMC patient advisory group is our ability to get patients into the system for their first appointment in a timely manner. It measures the effect of changes in the overall scheduling system and not our responsiveness to a single patient who needs to be seen quickly. For this reason, the 3rd Next Available is preferable to the first or second. It has been shown in other settings to be a better reflection of system availability because often first and second available appointments are due to cancellations, “working patients into the schedule”, or other events.

II. Population Definition (Inclusions/Exclusions)

All outpatient clinical divisions within the Department of Pediatrics, Department of Surgical Services, Department of Anesthesia, and Clinical Shared Services/Allied Health were considered. If a division has subspecialties that constitute a distinct set of clinical care providers caring for similar groups of patients, access was measured separately for the subspecialty (with division approval).

Division subspecialty

3rd Next Available Appointment will be measured for all *new* visit types that represents the top 80% of new visit volume for each division/subspecialty. The particular visit types that are included are in the table below and have been vetted by each division for accuracy. Visit types volumes will be revalidated every 2 years so the measure truly reflects any changes to the business that might occur as patient demand and potential interventions change things over time.

Visit types are considered only if the provider performing the visit represents the primary clinical visit for the patient within each division/subspecialty (i.e. nursing visits are excluded; genetic counselors are excluded for certain divisions; psychologists are excluded for certain divisions)

If a division/subspecialty is considered the host for a multi-disciplinary clinic (MDC), that will be included for consideration in the top 80%. If the division/subspecialty is not the host clinic, that visit type will be excluded. Access for MDC's is reliant on the schedule of the host clinic for measurement purposes.

As of FY 2017 (unless otherwise noted), the following clinics and the visit type that is reported are listed below:

DIVISION/SUBSPECIALTY	Access (3NA NV)		New Visit Types Included	
	# of Visit Types	Total New Visits (Sept 2016)		
Pediatrics	Adolescent Med	3	179	THC * NV MD THC * BH MD ED NV THC * NEW CONSULT > 12 YRS OLD
	Allergy/Immunology	2	195	ALL * NV FOOD ALLERGY ALL NV
	Breastfeeding Medicine	1	~150	BMC LACTATION CONSULTATION
	Cardiology	6	413	CAR * NV GENERAL CAR NV ARRHYTHMIA CAR ** NV CARDIOMYOPATHY CAR NV SYNCOPE CLINIC CAR ** NV HTN CAR NV LIPIDS
	Dermatology	1	91	DER ** NV
	Developmental & Behavioral Peds (DDBP)	6	297	DDBP NV GENERAL 6 to 14 YO DDBP NV GENERAL 3 TO 5 YEARS OLD DDBP COMM ADOS/DUAL 5 YR & UND DDBP NV R/O ASD 5 AND UNDER DDBP NV ARENA B U3 DDBP NV ARENA A U3
	Endocrinology	1	279	END NV
	Gastroenterology, Hepatology, Nutrition (GI)	2	480	GAS NV GAS ** LIVER NV CLINIC
	General and Community Pediatrics	6	175	PPC NEWBORN HPC NEWBORN FPC NEWBORN PPC * NEWBORN AVONDALE PPC * NEWBORN PRICE HILL PPC NEW PT CHILD
	Healthworks	1	92	HEA NV
	Human Genetics	5	143	HGN * NV GENERAL CLINIC HGN * NV BRCA HGN * NV CONNECTIVE TISSUE HGN * NV RESIDENT HGN * NV GENETIC COUNSELING
	Infectious Disease	1	32	IDC NEW VISIT
	International Adoption Center	TBD	TBD	Determining applicability as a subspecialty
	Neonatology	2	82	NEO * NV HOSP DISCHARGE NEO ** NV NAS
	Nephrology	2	52	NEP NV NEP ** NV HTN
	Neurology	6	421	NEU NV NEU * NV HEADACHE CTR MDCH NEU * NV NOS 2-17 YRS NEU * NV MDO

			NEU * NV HEADACHE 0-20YRS NEU * NV SECOND OPINION
Physical medicine & rehab	4	79	PED REHAB NV PED REHAB * NV CP TEAM PED REHAB * NV BRAIN – MDCH PED REHAB * NV TBI
Psychiatry	4	295	PSY ** NV SW PSY ** NV APN PSY ** NV MD PSY ** NV MD AND FELLOW
Pulmonary medicine	4	205	PUL NV PUL ** NV SLEEP APNEA PUL * NV ASTHMA PUL ** NV SLEEP DISORDER
Rheumatology	2	110	RHE NV ATTENDING ONLY RHE NV ATTENDING AND FELLOW
Sports medicine	3	361	SPO * NV SPORTS MEDICINE SPO NV SPO * NV CONCUSSION
Mayerson Center			excluded from measure/no new visit type
Dental			excluded from measure/no Epic data
CBDI - HEM	6	80	HEM PED NV HEMATOLOGY HVMC ** HEM PED NV – MDCH HEM PED NV BLEEDING DO HEM PED NV VASCULAR HEM PED NV THROMBO HEM LIB ** NV HEMATOLOGY
CBDI - ONC	7	26	HEM AYA NV SOLID ONC HEM AYA ** NV NEURO ONC – MDC HEM OF PED NV SOLID ONC HEM PED NV SOLID ONC HEM AYA NV SVR NON MDC HEM PED ** NV NEURO ONC –MDCH HEM AYA NV LEUK LYMPH
CBDI - BMT	1	12	HEM PED NV IMMUNODEF
Complex Care	1	8	CSN ** COMPLEX CHRONIC NV 120
BMCP	6	470	BMCP NV THERAPY BMCP NV ADHD EVAL BMCP NV NP TEST BMCP NV PAIN BMCP NV TEST BMCP NV SLEEP
Cardiothoracic Surgery	1	24	CDV ** NEW VISIT
Ear, Nose, Throat (ENT)	3	864	ENT * NV EARS ENT * NV TONSIL PROBLEMS ENT * NV
General Pediatric Surgery	7	261	SUR NV SUR NV TRAUMA SUR * NV 30 SUR * NV G-TUBE COL ** NV SUR * NV PECTUS EXCAVATUM BAR ** INITIAL VISIT
Gynecology (Pediatric & Adolescent)	2	162	GYN NEW GYN > 12 YRS OLD GYN NEW GYN < 12 YRS OLD
Neurosurgery	1	76	NSU ** NV
Ophthalmology	2	574	OPH * NV NC OPH * NV C
Orthopedics	11	969	ORT * NV FRACTURE ORT * NV UPPER EXT FRACTURE ORT * NV HAND FX

			ORT * NV SPINE ORT * NV FOOT/ANKLE ORT ** ED NV UPPER EXT FX ORT * NV KNEE ORT * NV HIP ORT ** ED NV FRACTURE ORT * NV BACK AND OR NECK PAIN ORT * NV HAND
			PLA * NV PLAGIO PLA * NV ORT * NV HAND FX PLA * NV NEVUS OR MOLE PLA * NV ER FOLLOWUP PLA * NV CYSTS ORT * NV HAND PLA SUR * NV WOUND CARE PLA * NV CLEFT LIP OR PALATE>1 PLA * NV FEMALE BREAST ISSUES PLA * NV SUPERNUMERARY DIGITIS HAND PLA * NV LUMPS AND BUMPS PLA * NV SKIN TAGS
	Plastic surgery	13	472
	Urology	3	556
			URO * NV SURGICAL URO * NV HEALTHY BLADDER URO * NV MEDICAL
Others	Pain Management	2	31
			PAI MUSCULOSKELETAL PAI MULTI-DISCIPLINARY
	OT/PT	10	982
			PT NV ORTHO OT NV GEN DEV PT NV GEN DEV OT NV DDBP PT NV TORT OT NV HAND PT NV GEN PT NV GEN DEV INFANT PT NV ORTHOTICS DD PT NV DDBP
	Speech Therapy	10	496
		SP NV SL 3+ SP NV VSS SP NV SL 2+ SP NV BIRTH TO 3 SP NV DYSPHAGIA SP NV SP NV DIAGNOSTIC CLINIC SP NV FLUENCY SP ** NV FEES CLINIC SP NV NICU	
Audiology	2	552	
		AUD * AE 0-5 YRS AUD * AE 6/OLDR	

III. Data Source(s)

For divisions using Cadence, the system used to schedule appointments, the data are collected from the call center. Once a week, the call center staff manually goes into the system and attempts to make a “fake” patient appointment for certain appointment type. For each visit type, they “spin” the scanner for the next available appointment and, once that is found, the Call Center agent “spins” 2 more times to identify the 3rd next available appointment and then records the date for each of the locations as well as the date the agent is spinning.

Data collections rules for division/subspecialty questionnaires are available here:



DataCollectionPlan
_SchedulingCenter\

IV. Sampling and Data Collection Plan

One data point is collected, once each week on Tuesdays for selected visit types for each outpatient clinic. The same day of week is used as reference point.

For clinics scheduling through other systems, the data should be collected out of that system weekly in a similar way. However, only clinics utilizing Cadence will be reported at this time.

V. Calculation

Overall Outpatient

The overall outpatient 3rd Next Available Appointment measure is measured as “3rd Next Available Appointment - % of Divisions at <=7 Days”

Numerator: Count of divisions/subspecialties who’s weighted 3NA (see below) <= 7 for the calculated reporting period

Denominator: # of division/Subspecialty reported

Divisional

Each division/subspecialty’s 3rd Next Available Appointment measure is a weighted average of each visit type for that division/subspecialty.

$$\text{weighted } 3NA_i = \frac{\sum(w_{ij} * x_{ij})}{\sum(w_{ij})}$$

where

weighted $3NA_i$ = average days until 3rd next available appointment weighted by patient volume of each visit type for each division/subspecialty i . This number is rounded to a calendar day whole number.

w_{ij} = total visit volume for division i and visit type j . Visit volume is scheduled appointments

x_{ij} = number of days until 3rd Next Available Appointment for division i and visit type j . x_{ij} is averaged for all the weekly points in a month to minimize the week to week variation in the overall measure.

VI. Analysis Plan and Frequency of Reporting

Data is collected weekly. Data is reporting monthly and can be rolled up quarterly and FY. FY YTD is reported to the PLT dashboard and is calculated as the % of divisions whose FY average 3NA is <= 7 days.

VII. Reporting Venues

VIII. Limitations

VIII. Experts/Resources

- Murray, Mark. Document: Measurement Package – Access and Office Efficiency – Primary and Specialty Care. Mark Murray & Associates.

VII. Revision History

Version	Primary Author(s)	Description of Version	Date Completed
Final	Anneken		5/2/2006
Revision 1	Anneken	Updated volume data for DDBP (added to the call center) As of November, 2006, Orthopaedics and Teen Health Center are reporting a weighted average of their visit types	1/7/2007
Revision 2	Anneken	As of FY2010, Teen Health is reporting for Consult Visits only as that is their subspecialty component Added details about BMCP, post EPIC go live	10/14/2009
Revision 3	Anneken	Gynecology is a surgical division. The GYN spin taken out of Teen Health's measure.	3/3/2011
Revision 4	Anneken	Visit type table update to reflect current reality where appropriate	3/23/2011
Revision 5	S. Keaton	Updated visit type column in table to reflect current "new visits" and updated % of Total Visit Volume as of July 2011	8/6/11
Revision 6	A. Anneken	Psychiatry measures to include social workers as well as MDs	
Revision 7	A. Anneken	Access 2.0 Information in this document is also located in the Informatica Business Glossary.	2/13/2017