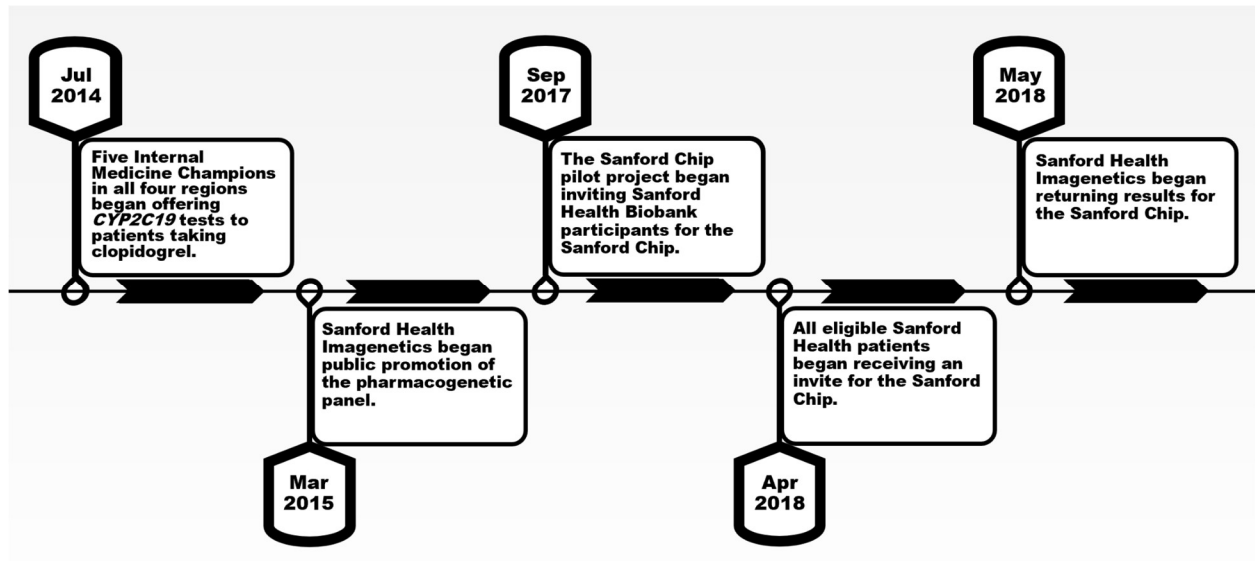


Supplemental Table S1. Referral Orders to Genetics Services by Specialty by Year

Specialty	Year 2013	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Year 2020
OB/GYN/ Women's Health	799 (18)	916 (21)	1433 (23)	1756 (28)	1919 (30)	2160 (31)	2721 (28)	3159 (35)
Oncology	223 (8)	393 (10)	593 (13)	605 (17)	671 (16)	869 (17)	918 (17)	1039 (23)
Family Medicine	119 (17)	187 (30)	325 (36)	382 (40)	541 (43)	803 (47)	894 (53)	969 (55)
Surgery	76 (9)	117 (11)	255 (11)	339 (11)	372 (12)	349 (13)	406 (18)	428 (19)
Cardiology	2 (1)	10 (5)	9 (5)	45 (6)	91 (12)	174 (18)	194 (25)	300 (23)
Breast Clinic	60 (1)	138 (2)	258 (2)	217 (2)	231 (3)	143 (3)	159 (6)	279 (6)
Neurology	5 (3)	25 (4)	52 (4)	34 (5)	93 (5)	156 (6)	224 (8)	261 (10)
Internal Medicine	41 (7)	107 (8)	187 (15)	164 (14)	331 (15)	259 (13)	283 (17)	168 (15)
GI	36 (1)	27 (2)	73 (2)	99 (2)	76 (2)	55 (3)	62 (6)	81 (5)
Nephrology	0 (0)	0 (0)	4 (2)	1 (2)	10 (2)	7 (3)	27 (4)	74 (6)
Endocrinology	11 (2)	29 (2)	30 (2)	13 (2)	34 (2)	38 (3)	34 (4)	70 (8)
ENT	31 (2)	34 (3)	31 (3)	17 (3)	31 (3)	32 (4)	31 (4)	68 (4)
Other	35 (11)	87 (29)	91 (31)	98 (32)	113 (46)	633 (48)	641 (61)	621 (64)
Total	1438 (80)	2070 (127)	3341 (149)	3770 (164)	4513 (191)	5678 (209)	6594 (251)	7517 (273)

This data represents the number of referral orders to clinical genetics by specialty (with number of departments within a specialty in parentheses) at Sanford Health by year from January 01, 2013 to December 31, 2020. Referral rates in 2020 may have been impacted by the pandemic. In addition, Breast Clinic referral orders did not always experience growth, but this could be due the Athena program that began in 2016 [46]. The Athena program identified high risk patients via questionnaire at time of mammogram with recommendation for genetic counseling if indicated in the mammogram report. Internal Medicine referral orders only went down when the number of departments went down which was likely impacted by staffing changes.

Supplemental Figure S1. Timeline for the Rollout of the Sanford Chip Program



Timeline of the genetic panel creation and rollout into primary care settings across the Sanford Health system.