

A Rapid and Sustained Transition to Telemedicine Head and Neck Cancer Care

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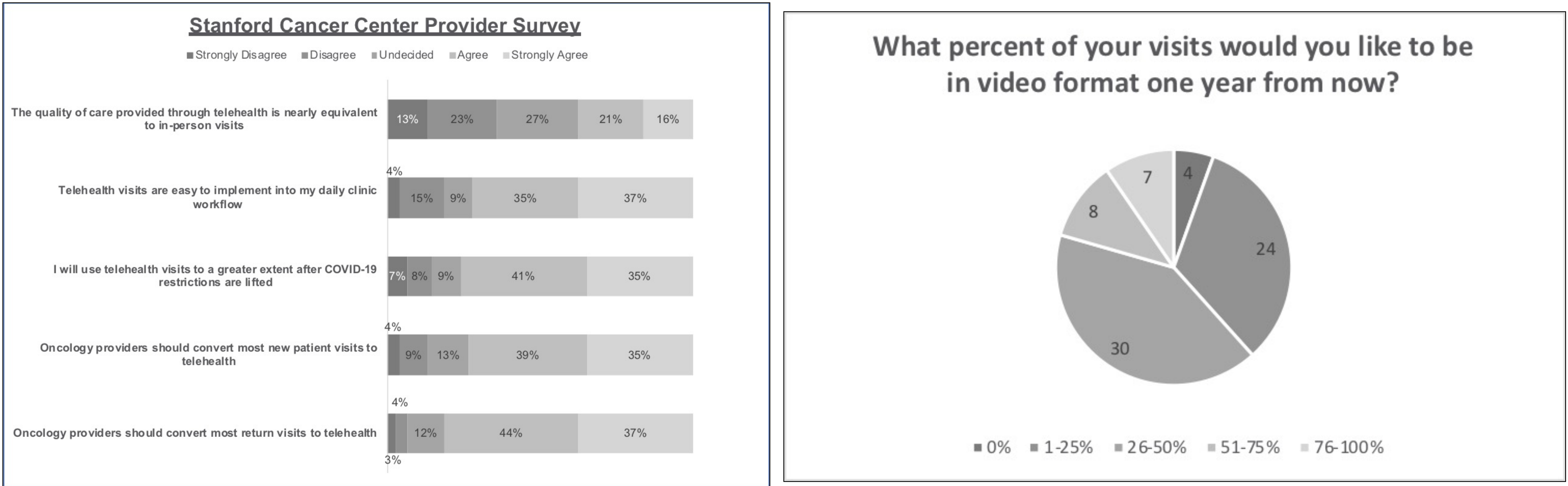
Background

The COVID-19 pandemic produced major challenges to conventional cancer care, including the risk of transmission with face-to-face visits. Patient care experienced a dramatic shift from in-person to telemedicine-facilitated clinical encounters at our academic Cancer Center, aided by governmental relaxation of privacy regulations. This was sustained despite low community prevalence of COVID-19 and relaxation of strict public health restrictions. In this study we describe the impact of telemedicine on clinical workflow for oncology patients and providers starting in 2020.

Methods

Following Institutional Review Board approval, Epic electronic medical record (EMR) outpatient clinical encounter data at a tertiary care academic center (Stanford Cancer Center; Blake Wilbur, Palo Alto, CA) was collected for in-person and telemedicine visits in the division of Head and Neck Oncology between January and November 2020. Provider specialties included Head and Neck Surgery, Medical Oncology, Radiation Oncology, Speech and Language Pathology (SLP)). Tumor board discussions were excluded from the analysis, as these did not represent direct patient care visits. Patients were offered surveys after remote visits to evaluate their experience. In late March, a survey was sent to oncology providers across all divisions of cancer care to assess the quality and satisfaction with telemedicine visits. The survey was comprised of six questions on Likert scales. As responses were collected anonymously, no granularity was possible regarding the specific oncologic divisions represented.

Provider Perspectives



Results

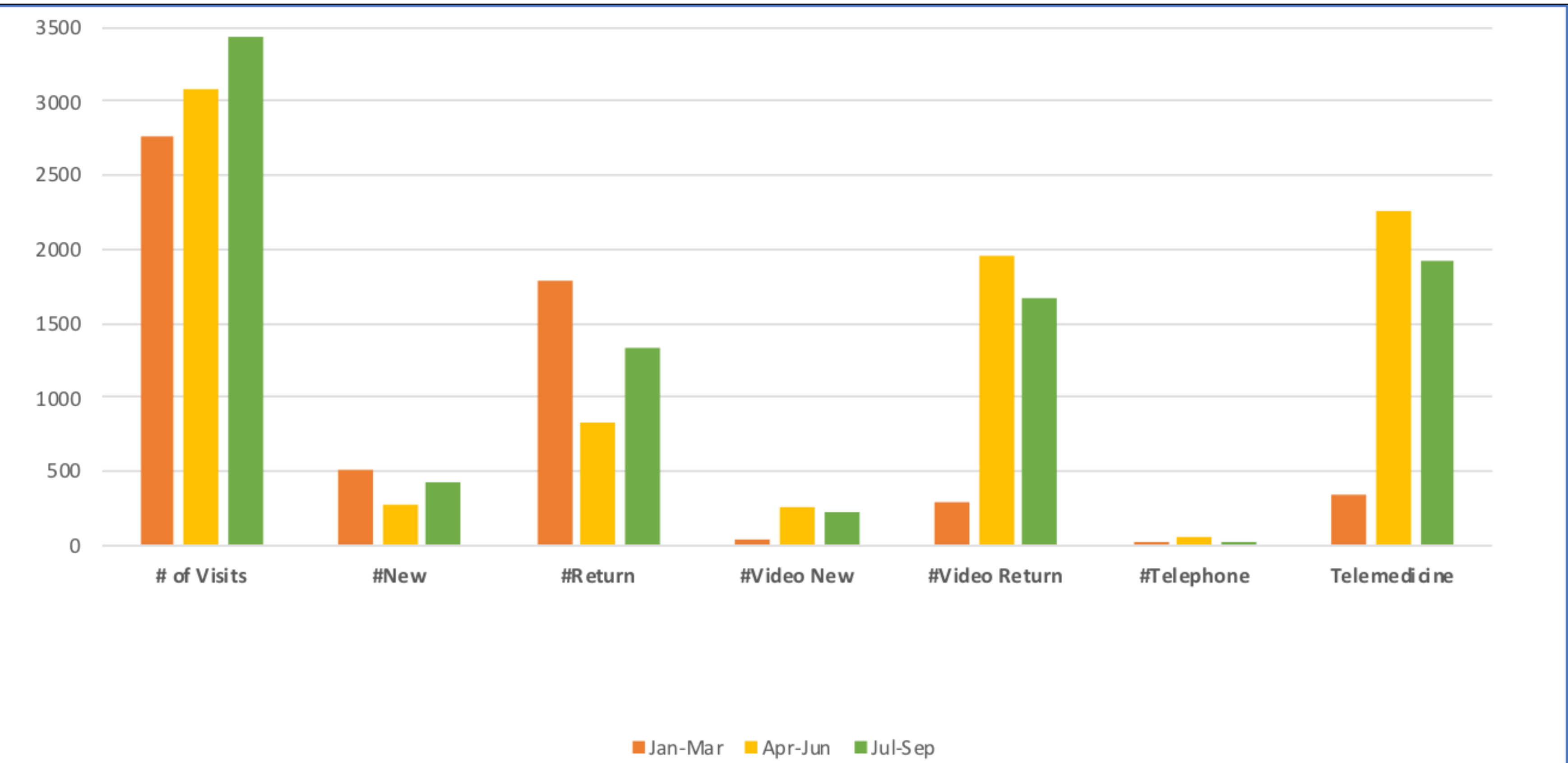


Figure & Table 1: Breakdown of clinical encounters in two-month intervals before and after outbreak of COVID-19 in Northern California

During the first quarter of 2020 there was a decline in overall cancer care visits, with 338 telemedicine encounters (12.2%). No telemedicine care was performed prior to March. Patient care then experienced a dramatic shift from in-person to telemedicine-facilitated clinical encounters, fueled by public health concerns and governmental relaxation of privacy regulations. 2,258 virtual visits were performed during the second quarter, representing nearly three-quarters of all care (72.3%). With declining concerns of community and nosocomial spread, and increased adoption of epidemiologic interventions such as testing and masking, there was a 24% decrease in telemedicine delivered care in the third quarter of 2020. However, 1,917 virtual encounters were still performed between July and September. The increase largely represented return visits with around 10% of virtual visits for new patient evaluations. Nonetheless, in-person new patient visits declined over the study period, supplanted by telemedicine. 76% of providers anticipated maintaining a degree of telemedicine care after COVID-19. 71% of patients reported they would continue to schedule video visits.

DATES	# of Visits	#SLP	#HNS	#RAD	#MED	#New	#Return	#Treatment	#Video New	#Video Return	#Telephone	Telemedicine	PERCENT
Jan-Mar	2760	518	1541	283	418	505	1791	60	34	298	6	338	12.2463768
Apr-Jun	3074	412	1325	272	962	281	826	503	258	1951	49	2258	73.454782
Jul-Sep	3440	547	1685	339	869	425	1329	536	218	1672	27	1917	55.7267442
	# of Visits	#SLP	#HNS	#RAD	#MED	#New	#Return	#Treatment	#Video New	#Video Return	#Telephone	Telemedicine	PERCENT
Period 1 to 2	314	-106	-216	-11	544	-224	-965	443	224	1653	43	1920	499.808279
Period 2 to 3	366	135	360	67	-93	144	503	33	-40	-279	-22	-341	-24.134627
Period 1 to 3	680	29	144	56	451	-80	-462	476	184	1374	21	1579	355.046787