

Table 1 –GOC Communication Support Interventions Study Characteristics

Study No.	Authors, (Year), Country	GOC Intervention Modality	Sample Eligibility Criteria	Sample Characteristics Age(yrs.); Gender: M/F%	Sample Setting	Study Aim
1	Bakitas et al. (2015) USA	Early Palliative Care	English-speaking $\geq 18$ years, advanced-stage cancer, prognosis $\geq 6$ and $< 24$ mos., cognitively intact	207 advanced lung, GI & breast cancer patients: mean age= 64.3 $\pm$ 10 yrs.; 47% female	4 rural outpatient cancer clinics in ME and VT, USA	Effect of early vs. delayed PC on patient QOL, symptom impact, 1-year survival, and resource use.
2	Dionne-Odom et al., (2015) USA	Early Palliative Care	<i>See Bakitas (2015) study</i> patients identified their own CG(s), English-speaking, age $\geq 18$ years.	122 CG's of 207 advanced cancer patients of Bakitas (2015) study; mean age = 60 yrs., 79% female and 93% white	4 rural outpatient cancer clinics in ME and VT, USA	Effect of early vs. delayed PC on family caregivers of patients
3	Temel et al., (2017) USA	Early Palliative Care	English-speaking $\geq 18$ years, cancer patients with new terminal diagnosis, cognitively intact	350 patients: 46% female, mean age: 64.8 $\pm$ 10.9 years; 92% white	1 urban academic hospital in MA, USA	Impact of early integrated PC in newly diagnosed lung and GI cancer patients
4	Zimmerman et al., (2014) Canada	Early Palliative Care	English-speaking $\geq 18$ years, cancer patients, prognosis $\geq 6$ and $< 24$ mos., cognitively intact	461 patients, mean age 61, 57% female	1 urban hospital in Toronto, Canada	Evaluate effect of early PC in advanced cancer patient's QOL
5	Curtis et al., (2013) USA	Clinician Communication Training	MD/NP: trainees in critical, oncology, geriatrics & palliative medicine. Patients: $\geq 80$ yrs. age; $\leq 2$ years prognosis	472 trainees (391 M.D.'s & 81 N.P.'s) mean age 30 $\pm$ 5.3 years; 57% female	2 urban academic hospitals' in SC and WA, USA	Effect of a communication skills intervention for M.D./N.P. trainees on patient- and family-reported outcomes
6	Goelz et al., (2011) Germany	Clinician Communication Training	M.D.'s with advanced cancer patients and German-speaking	41 M.D.'s 56% female, mean age: 31 $\pm$ 4 yrs., Intervention M.D.'s significantly more professional experience ( $P=.02$ )	1 urban academic hospital in Freiburg, Germany	Effect of individualized communication skills training on PC transitions
7	Szmulowicz et al., (2012) USA	Clinician Communication Training	PGY-1 internal medicine M.D. residents eligible to participate in study.	38 PGY-1 M.D.'s Mean age 26.8 $\pm$ 1.8 years Significantly more male residents in the control group 15/19	1 urban academic hospital in IL, USA	Effect of individualized communication skills training on M.D. residents
8	Detering (2010) Australia	Patient Communication Support	English-speaking $\geq 80$ years, cognitively intact, death or discharge $\geq 24$ hours, family/surrogate available	309 enrolled patients, 49% female, median age: 85 years	1 urban academic hospital in Melbourne, Australia.	Impact of adaptation of "Respecting Choices" ACP intervention on EOL care
9	Lum et al., (2017) USA	Patient Communication Support	English-speaking, CHF diagnosis with first discharge to SNF, prognosis $\geq 6$ mos., cognitively intact	370 enrolled HF patients, 58% female, mean age: 79 $\pm$ 10 years; 93% white,	33 SNF's in CO, USA	Impact of MOST documentation interventions on goal-concordant care, ED visits, hospitalizations
10	Song et al., (2009) USA	Patient Communication Support	English-speaking African Americans $>18$ yrs., cognitively intact, receiving dialysis $\geq 3$ months, surrogate available	58 patients mean age 58 $\pm$ 12 yrs.; 57% female; 58 surrogates mean age 49 $\pm$ 13 yrs.; 75% female	6 outpatient dialysis clinics in PA, USA	Effect of patient-surrogate GOC intervention on congruence, conflict, confidence & well-being.
11	Steinhauser et al., (2017) USA	Patient Communication Support	English-speaking $\geq 18$ years, advanced cancer, COPD, CHF, ESRD patients not on hospice, cognitively intact	221 patients, mean age 68.3 $\pm$ 9 yrs.; 4% female, 53% white	4 urban VA outpatient clinics & 1 VA SNF in NC, USA	Effect of 2 interventions: on seriously ill patients' anxiety, depression and QOL
12	Carson et al., (2016) USA	Family Communication Support	English-speaking caregivers of ICU patients, $\geq 21$ years, ventilation $\geq 96$ hrs., prognosis $< 72$ hrs.	256 patients, mean age 58 yrs.; 66% female; 365 CG's mean age, 58 years; 59% female; 88% spouses	4 hospital ICU's in MA, NC and NY, USA	Impact of CG info & emotion support mtgs. led by PC clinicians on anxiety and depression.
13	McDonald et al., (2016) USA	Family Communication Support	<i>See Zimmerman et al. (2014) study</i> Patient-identified English-speaking CG, age $\geq 18$ yrs.	182 CG mean age, 58 yrs.; 64% female; 84% white; 461 patients mean age 61 yrs.; 57% female	1 urban hospital in Toronto, Canada	Effect of early PC on CG's satisfaction with care and QOL
14	Sulmasy et al., (2017) USA	Family Communication Support	Patient-identified English-speaking CG, age $\geq 18$ yrs. Patients cognitively intact $\geq 18$ yrs. with ALS or GI cancer	166 patients mean age 61 yrs. $\pm$ 11, 43% female, 67% white; 166 CG mean age 56 yrs. $\pm$ 12, 73% female.	2 urban academic hospitals in MD and IL, USA	Effect of communication intervention on surrogates' stress in EOL decision-making
15	Au et al., (2012) USA	Patient - Clinician Communication	English-speaking COPD VA patients, age $\geq 18$ yrs., cognitively intact	92 clinicians, 70% M.D., 47% female; 376 patients 97% male, mean age: 69.4 $\pm$ 10 yrs.	1 urban VA outpatient clinic in WA, USA	Effect of patient-clinician communication intervention on GOC communication
16	Curtis et al., (2018) USA	Patient - Clinician Communication	MD's & NP's with $\geq 5$ eligible English-speaking, cognitively intact patients, prognosis $\leq 2$ yrs.; $\geq 75$ yrs. age	132 clinicians 54% female; mean age, 47.1 $\pm$ 9.6 years; 93% MD's 537 patients; 48% female, mean age: 73 $\pm$ 13 yrs.	2 urban academic and 5 community care hospitals in WA, USA	Effect of GOC communication interventions patients and clinicians to increase GOC conversations
17	Tulsky et al., (2011) USA	Patient - Clinician Communication	English-speaking advanced cancer patients, age $\geq 18$ years, cognitively intact, prognosis $< 12$ mos. MD's with $\geq$	48 Oncologists: 19% female; mean age, 48 $\pm$ 8 yrs.; 80% white; MD experience 20 $\pm$ 22 yrs.	2 urban academic hospitals in NC and PA, USA	Evaluate computer-based GOC communications skills intervention on MD responses to patient

			4 clinic visits per eligible patients	264 Patients: 44% female mean age: 61±14 yrs.; 84% white		expressions of negative emotion.
18	El-Jawahri (2010) USA	Patient Decision Aids	English-speaking advanced brain cancer patients ≥ 18 yrs. age cognitively intact, referred by MD	50 advanced brain cancer patients, 44% female, mean age: 54±10 years; 92% white	1 urban academic hospital in MA, USA	Effect of GOC comprehension video on patients ACP preferences
19	El-Jawahri (2015) USA	Patient Decision Aids	English-speaking patients, prognosis ≤ 1 year; age > 60 years, cognitively intact.	150 patients mean age: 76 ±11 yrs., 51 % female	2 urban academic hospitals in MA, USA	Effect of GOC comprehension video on patients ACP preferences, knowledge & GOC discussions with MDs
20	El-Jawahri (2016) USA	Patient Decision Aids	English-speaking CHF patient; age > 64 years, cognitively intact; prognosis: > 50% of patients' decedent ≤ 2 yrs.;	246 CHF patients; 39% female, mean age: 81±8 years; 85% white	7 urban academic hospitals in CO, MA, TN USA	Impact of GOC video decision aid and patient checklist on ACP preferences
21	Epstein (2018) USA	Patient Decision Aids	English-speaking advanced cancer patients ≥ 21 yrs. age r; prognosis > 1 month, < 1 yr., cognitively intact	151 advanced GI cancer patients, 37% female, mean age: 61 yrs.; 58% white	1 urban academic hospital in NY, USA	Effect of a GOC comprehension video & ACP values communication intervention, on patients ACP preferences
22	Volandes et al., (2012) USA	Patient Decision Aids	English-speaking SNF patients ≥ 65 yrs., cognitively intact	101 patients mean age 78 ±8 yrs.; 61% female, 38% white,	2 SNFs in MA, USA	Effect of GOC comprehension video on ACP preferences for SNF patients
23	Volandes et al., (2013) USA	Patient Decision Aids	English-speaking advanced cancer patients, prognosis < 1 yr., cognitively intact	150 patients mean age: 62 ±11 yrs.; 49% female, 47% white	4 urban outpatient oncology clinics in MA, NY & TN, USA	Effect of GOC comprehension video on advanced cancer patient CPR preferences

Legend: ACP: Advance Care Planning; AD: Advance Directive; CG: Caregivers; CHF: Congestive Heart Failure; COPD: Chronic Obstructive Pulmonary Disorder; CPR: Cardio-Pulmonary Resuscitation; DNR: Do Not Resuscitate; DNI: Do Not Intubate; EHR : Electronic Health Record; EOL: End of Life; ER: Emergency Room; ESRD: End-Stage Renal Disease; GI: Gastro-intestinal; GOC: Goals of Care; ICU: Intensive Care Unit; NP: Nurse Practitioner; MD: Medical Doctor; PC: Palliative Care; RN: Registered Nurse; QOC: Quality of Communication; QOL: Quality of Life; NSF: Skilled Nursing Facility; SW: Social Worker; VA: Veteran's Affairs