

**TABLE 1** Characteristics of studies accepted for analysis

Ref	Author (Yr pub)	Study time Pperiod	Study location	Design	Process	Endpoint Measured:			Provider Population	Pati Popul
						Outcome	Satisfaction	Cost		
21	Breslau (1981)	1978	Cleveland, OH	Cross-sectional			After controlling for demographic factors, waiting time, increased continuity, using PC scale was associated with increased satisfaction ( $P<.01$ ) but not other indices.		P, PS, NP	Child
22	Chao (1988)	1984	Not mentioned	Cross-sectional			After controlling for demographic factors, increased continuity, using PC scale was associated with increased satisfaction ( $P<.01$ ) but not other indices.	After controlling for demographic factors, increased provider costs (provider costs or MCO costs for services provided, not actually billed) was associated with greater UPC ( $P=.04$ ), but not other indices.	FP	Adt
23	Cornelius (1997)	1987	United States	Cross-sectional				Total annual health expenditures for low continuity group was \$3,545 vs \$2279 for the high continuity group. Findings were consistent for dental services, prescribed medicine, physician visits and hospital stays ( $P<.05$ ). It is unclear if costs were defined as patient, provider, third-party, or societal costs.	R	Not mer
24	Ettner (1999)	1995	United States	Cross-sectional	Increased continuity was associated with increased likelihood a preventive medicine visit in the last year (OR=3.41; 95% CI, 2.68–4.33).	Increased continuity was associated with decreased likelihood of drug or alcohol abuse behaviors (OR=0.59; 95% CI, 0.40–0.87).			R	Adt
25	Freeman (1994)	1989-1990	United Kingdom	Cross-sectional	Increased continuity was associated with having a good relationship with their physician and sufficient knowledge about their provider ( $P<.01$ ).	Increased continuity was not associated with engaging in exercise (OR=0.98; 95% CI, 0.75–1.27), quitting smoking (OR=0.88; 95% CI, 0.63–1.22, or having a body mass index that meets criteria for obesity (OR=1.04; 95% CI, 0.79–1.38).			GP	Adt
26	Gill (2000)	1993-1994	Delaware	Cross-sectional	No association with ease with talking to physician.	Increased continuity is associated with lower likelihood of making multiple ED visits (OR=0.84; 95% CI, 0.72–0.98), but not for lower likelihood of making a single ED visit (OR=1.14; 95% CI, 0.95–1.17).			PCP, NP, PA	Children
27	Love (2000)	1997	Kentucky	Cross-sectional	Increased continuity was associated with patient perception of physician-patient communication ( $P=.01$ for asthmatic patients; $P=.001$ for nonasthmatic patients), as well as				PCP	Children

28	O'Malley (1996)	1988	United States	Cross-sectional	patient perception regarding ability to influence treatment ( $P=.02$ for asthmatic patients; $P=.0001$ for nonasthmatic patients). Increased continuity was associated with increased likelihood of age-appropriate interval since last routine care visit ( $P<.02$ )			R	Chilc
29	O'Malley (1997)	1992	New York, NY	Cross-sectional	Increased continuity was associated with increased likelihood of ever or recently receiving Papanicolaou smears ( $P=.003$ , $<.001$ ); clinical breast exams ( $P<.001$ , $<.001$ ) and mammograms ( $P<.001$ , $=.001$ ).			R	Won
30	Strumberg (2001)	1995–1997	Australia	Cross-sectional	Comprehensiveness of care score (0; low-13; high) was significantly higher for continuity group, 7.38 (95% CI, 7.04–7.71) versus 6.03 (95% CI, 5.7–6.35) for the discontinuity group.			GP	Children
31	Weiss (1989)	1985	Roanoke, VA	Cross-sectional		Increased continuity associated with all 5 components of patient satisfaction scale, such as carefulness, concern, willingness to listen, willingness to spend time, information ( $P<.001$ using Spearman's rank correlation coefficient).		PCP	Not mer
32	Lambrew (1996)	1987	United States	Cross-sectional	Women, 18 yrs and older with greater continuity have increased likelihood of receiving a clinical breast examination compared to those with decreased continuity (86% vs. 81%, $P<.01$ )  Women, 50 yrs and older with greater continuity have increased likelihood of receiving a mammogram compared with those with decreased continuity (44% vs 35%, $P<.01$ )  Greater continuity was not associated with receipt of MMR, polio, or DTP immunization for children, or pap smear for women 18 yrs and older.			R	Not mer
33	Christakis (2001)	1992–1997	Washington	Cohort	Increased continuity associated with increased likelihood of ophthalmologist care (OR=2.89; 95% CI, 1.08–3.88).  Increased continuity is not associated with increased likelihood of glycosylated hemoglobin testing (OR=1.22; 95% CI: 0.45-1.57) or thyroid studies (OR=1.03; 95% CI, 0.46–2.30).	Increased continuity associated with decreased likelihood of outpatient DKA (OR=0.30; 95% CI, 0.13–0.71), and inpatient DKA (OR=0.14; 95% CI, 0.03–0.67).		P, FP	Chilc
34	Christakis (2001)	1993–1998	Seattle, WA	Cohort		Decreased continuity is associated with increased risk of ED utilization (HR=1.58; 95% CI, 1.49–1.66) and increased risk of hospitalization (HR=1.54; 95% CI, 1.33–1.75).  For children with asthma, decreased continuity is associated with increased risk of hospitalization (HR=1.76; 95% CI,		P, FP	Chilc

35	Christakis (2000)	1980-1998	Seattle, WA	Cohort	Increased continuity was associated with increased likelihood of receiving MMR vaccination (OR=1.36; 95% CI, 1.22–1.52).	1.21-2.56), but is not associated with increased risk of ED utilization (HR=1.13; 95% CI, 0.82–1.60)		P, FP	Child
36	Gill (1998)	1993-1995	Delaware	Cohort		Increased continuity is associated with lower likelihood of hospitalization for any condition (OR=0.56; 95% CI, 0.46–0.69) and for chronic ambulatory care sensitive conditions (OR=0.54; 95% CI, 0.34–0.88).  Increased continuity is not associated with lower likelihood of hospitalization for acute ambulatory care sensitive conditions (OR=0.80; 95% CI, 0.48–1.34).		PCP, NP, PA	Children
37	Parchman (2002)	1994-1996	Texas	Cohort		Increased continuity was associated with better glucose control for adults with diabetes ( $P=.002$ )		PCP, NP, PA	Adult
38	Wasson (1984)	1979-1981	White River Junction, VT	RCT	No differences between the continuity group and the discontinuity group in scheduled or unscheduled clinic visits, missed appointments, specialty referrals, or receipt of preventive care procedures such as hemocult slide testing, blood pressure measurement, weight assessment or assessment of smoking status (all $P>.05$ ).	No differences between continuity group and discontinuity group for emotional impairment, limitations in activities of daily living, chronic pain, or mobility limitations (all $P>.05$ ).  Continuity group had significantly less hospital days per patient (5.7 vs 9.1, $P=.02$ ); less intensive care days per patients (0.4 vs 1.4, $P=.01$ ); shorter length of stay, if hospitalized (15.5 vs 25.5, $P=.008$ ); and decreased percent of emergent hospitalizations (20% vs 39%, $P=.002$ ) compared to discontinuity group	No difference in patient satisfaction between the continuity and discontinuity groups ( $P>.05$ ).  Continuity group had significantly higher satisfaction with continuity ( $P<.001$ ), with provider knowledge and thoroughness ( $P=.04$ ), and perceived provider knowledge and thoroughness ( $P<.001$ ) compared with discontinuity group	I, NP, PA	Me

R, “your regular physician”; Ref, article reference number; P, pediatrician; I, internist; FP, family practitioner; PS, pediatric specialist; GP, general practitioner; PCP, primary care physician; NP, nurse practitioner; PA, physician assistant; CP, cerebral palsy; CF, cystic fibrosis; RCT, randomized controlled trial. CI, confidence interval; DKA, diabetic ketoacidosis; ED, emergency department; HR, hazard ratio; OR, odds ratio.