APPENDIX 3: CHARACTERISTICS OF INCLUDED SYSTEMATIC REVIEWS

Study Year	No. of Included Studies	Patient Population	Intervention	Comparator	Outcomes
Specialized Anticoagulation Clinics					
Bloomfield et al.[33] 2011	3 RCTs (722 subjects), 8 cohort studies (12,768 subjects)	Mean age: 69 Mixed indications	ACC, various models (6 pharmacist-managed)	Non-specialized primary care clinic, physician office	RCTs *TTR (method not described, 3 RCTs)* Favours ACC 59.9% versus 56.3% *Mortality (2 RCTs)* RR 0.81, 95% CI 0.25 to 2.58 *Major bleeding (not defined, 3 trials)* RR 1.05, 95% CI 0.36 to 3.12 *Major thromboembolism (3 RCTs)* RR 1.29, 95% CI 0.59 to 2.81 Significant improvement in patient satisfaction with ACC care (2 RCTs) Cohort *TTR (method not described, 4 studies)* Favours ACC 63.5% to 53.5% *Mortality (1 study)* No significant difference *Major bleeding (5 studies)* 1 study favours UC, 1 favours ACC, 3 significance not tested *Major thromboembolism (4 studies)* 1 favours UC, 1 favours ACC, 2 significance not described *Hospitalizations, ER visits* 2 studies favour ACC, 1 found no difference

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Study Year	No. of Included Studies	Patient Population	Intervention	Comparator	Outcomes
Saokaew et al.[34] 2010	5 RCTs (862 subjects), 19 non-randomized (727,515 subjects)	Mean age: 62.5 Mixed indications Warfarin only	Warfarin management in which a pharmacist participated	Usual physician provided care	RCTs *Major bleeding (definition varies by study, 4 RCTs)* RR 0.64, 95% CI 0.18 to 2.36 *Total bleeding (4 RCTs)* RR 0.51, 95% CI 0.28 to 0.94 *Thromboembolism, any (4 RCTs)* RR 0.79, 95% CI 0.33 to 1.93 *Mortality (3 RCTs)* RR 0.93, 95% CI 0.41 to 2.13 Non-randomized studies *Major bleeding (definition varies by study, 11 trials)* RR 0.49, 95% CI 0.26 to 0.93 *Total bleeding (19 trials)* RR 0.71 95% CI 0.52 to 0.96 *Thromboembolism, any (15 trials)* RR 0.37, 95% CI 0.26 to 0.53 *Mortality (4 trials)* RR 0.85, 95% CI 0.37 to 1.98
Cios et al.[35] 2009	24 non-randomized studies (43 study groups, 26,979 patients)	Mean age: NR Indications: NR Warfarin only	ACC (details not described)	Community care	TTR (mixed interpolation methods, US patients only) ACC: 64%, 95% CI 62% to 67% UC: 51%, 95% CI 48% to 54% Adjusted mean difference: –13%, 95% CI –18.1% to –7.9% TTR (post-hoc inclusion of Canadian studies) ACC: 65%, 95% CI 61% to 69% UC: 53%, 95% CI 50% to 56% Adjusted mean difference: –11.3%, –16.2% to –6.3%

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Study Year	No. of Included Studies	Patient Population	Intervention	Comparator	Outcomes
Baker et al.[36] 2009	8 non-randomized studies (22,237 patients)	Mean age: NR AF only Warfarin only US only	ACC — study took place in a clinic, or role of clinicians limited to anticoagulation management	Community practice — study was not an RCT or classified as ACC	TTR (mixed interpolation methods) ACC: 63%, 95% CI 58% to 68% UC: 51%, 95% CI 47% to 55% Meta-regression indicates patients in UC spend 11% (95% CI 2% to 20%, 6 studies, 9 groups) less time in range
Dolan et al.[37] 2008	22 studies (28 study groups; 35,199 patient-years)	Mean age: NR AF only	ACC (details not described, 18 study groups)	Non-specialist setting (including family practice, 10 study groups)	TTR (methods not described) ACC: 63.6%, 95% CI 61.3% to 65.9% UC: 52.3%, 95% CI 42.1% to 62.4% Difference: 11.3%, 95% CI 0.1% to 21.7%
van Walraven et al.[38] 2006	67 studies (123 study groups; 50,208 patients)	Mean age: NR Mixed indications	ACC — study took place in clinic or role of clinicians limited to anticoagulation management (84 study groups)	Community practice — study was not an RCT or classified as ACC (30 study groups) RCT (9 study groups)	TTR (mixed methods) RCT: 66.4%, 95% CI 59.4% to 73.3% ACC: 65.6%, 95% CI 63.7% to 67.7% UC: 56.7%, 95% CI 51.5% to 62% Difference (ACC vs. RCT) –3.9%, 95% CI –10.7% to 2.9% Difference (UC vs. RCT) –12.2%, 95% CI –19.5% to –4.8%
Patient Self-testing or Self-management					
Bloomfield et al.[33] 2011	27 studies reporting on 22 RCTs (8,413 subjects)	Mean age: 65 Mixed indications	PST or PST/PSM	ACC, primary care, or physician office	*TTR (methods not described)* PST/PSM 66.1% vs. other care 61.9% Weighted mean difference: 1.5%, 95% CI –0.63% to 3.63% *Mortality* Favours PST/PSM: OR 0.74, 95% CI 0.63 to 0.87 *Thromboembolism* Favours PST/PSM: OR 0.58, 95% CI 0.45 to 0.75 *Major bleeding* No statistically significant difference:

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Study Year	No. of Included Studies	Patient Population	Intervention	Comparator	Outcomes
					OR 0.89, 95% CI 0.75 to 1.05 8 studies reported improvements in quality of life (4 studies) or patient satisfaction (4 studies) out of 11 studies reporting these outcomes
Garcia-Alamino et al.[39] 2010	26 studies reporting on 18 RCTs (4,723 patients)	Mean age: NR Mixed indications	PST or PST/PSM	ACC or personal physician care	TTR (methods not described) 3 of 11 studies reporting TTR report significant improvement with PST/PSM *Mortality* Favours PST/PSM: RR 0.64, 95% CI 0.46 to 0.89 *Thromboembolism* Favours PST/PSM: RR 0.50, 95% CI 0.36 to 0.69 *Major bleeding* No difference: RR 0.87, 95% CI 0.66 to 1.16 *Minor bleeding* Favours PST/PSM: RR 0.64, 95% CI 0.54 to 0.77 PST alone *Mortality* No difference: RR 0.84, 95% CI 0.50 to 1.41 *Thromboembolism* No difference: RR 0.57, 95% CI 0.32 to 1.00 *Major bleeding* Favours PST: RR 0.56, 95% CI 0.35 to 0.91 *Minor bleeding* No difference: RR 0.93, 95% CI 0.72 to 1.20

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Study Year	No. of Included Studies	Patient Population	Intervention	Comparator	Outcomes
					5 of 8 studies evaluating quality of life outcomes reported a significant difference in treatment satisfaction or quality of life with PST/PSM
Cios et al.[35] 2009	24 non-randomized studies (43 patient groups, 26,979 subjects)	Mean age: NR Indications: NR Warfarin only	PSM (2 patient groups)	ACC or community care (41 patient groups)	TTR (mixed interpolation methods, US patients only) PSM: 58%, 95% CI 47% to 51% No PSM: 57%, 95% CI 55% to 59% Adjusted mean difference: –8.9%, 95% CI –25.7% to 7.8% TTR (post-hoc inclusion of Canadian studies) PSM: 65%, 95% CI 55% to 76 % No PSM: 59%, 95% CI 56% to 61% Adjusted mean difference: –2.0, 95% CI –15.3% to 11.2%
Wells et al.[40] 2007	17 studies describing 16 RCTs (4,460.7 patient-years)	Mean age: NR Mixed indications	PST or PST/PSM	ACC or primary care	TTR (Rosendaal method) Favours PST/PSM: 71% (95% CI 68 to 78) vs. 63% (95% CI 60 to 65) Mortality (favours PST/PSM, 6 trials) OR 0.48, 95% CI 0.24 to 0.94 Major thromboembolism (favours PST/PSM, 11 trials) OR 0.49, 95% CI 0.30 to 0.79 All thromboembolism (favours PST/PSM, 8 trials) OR 0.45, 95% C 0.24 to 0.84 Major bleeding (no difference, 10 trials) OR 0.75, 95% CI 0.47 to 1.20

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Study Year	No. of Included Studies	Patient Population	Intervention	Comparator	Outcomes
Connock et al.[41] 2007	16 RCTs (4,444 patients), 8 non-randomized (1,284 patients)	Mean age: NR Mixed indications	PST or PST/PSM	ACC or primary care/family-doctor managed anticoagulation	TTR (method not described) RCTs (12 studies) 67.4% PST/PSM vs. 63.4% other care when separated by controls used: 67.1% PST/PSM vs. 66.3% ACC 74.8% PST/PSM vs. 59.8% UC P-values not reported *Mortality (favours PST/PSM)* RD –0.017, 95% CI –0.029 to –0.005 *Thromboembolism (favours PST/PSM)* RD –0.02, 95% CI –0.03 to –0.01 *Bleeding (no difference)* RD –0.004, 95% CI –0.015 to 0.007 6 studies reported quality of life outcomes. 3 favoured PST/PSM, 3 reported no significant difference between PST/PSM and other care.
van Walraven et al.[38] 2006	67 studies (123 study groups; 50,208 patients)	Mean age: NR Mixed indications	PSM (7 patient groups)	ACC or community care (116 patient groups)	TTR (mixed methods) No PSM: 63.1%, 95% CI 61% to 65.2% PSM: 71.5%, 95% CI 65.2% to 77.7% Difference: 7%, 95% CI 0.7% to 13.3%

ACC = specialized anticoagulation clinic; NR = not reported; OR = odds ratio; PST = patient self-testing; PSM = patient self-management; RD = risk difference; RR = relative risk; TTR = time in therapeutic range; UC = usual care.

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