Study	# of HA cases	Site infected	Evidence for acquisition	Potential sources
Cox & Hughes 1975	2	Lung-2	Temporal relationship of contacts	 Unknown Speculated airborne from patient with laryngeal lesion
Houang et al. 1980, Lovett et al. 1981, Stevens et al. 1981	6	Lung-5 Wound-1	- Temporal relationship of contacts - Patient isolates phenotypic match - Unit environmental isolates (air, dust) phenotypic match with patient isolates - <i>Nocardia</i> not isolated from non-unit environmental cultures	 Believed to be environmental; environmental & patient isolates same phenotype Index patient had Nocardia- infected urine that was dumped in sink that may have contaminated environment Case with Nocardia wound infection may have contaminated environment Hands of health care workers not cultured, therefore person-to person not ruled out
Simpson et al. 1981	4	Lung - 4	- Patients infected post-cardiac transplant but prior to d/c	 Unknown No temporal relationship No investigation for source or relationship of isolates performed
Baddour et al. 1986	2	Lung - 1 CNS - 1	- Weak temporal and spatial relation between index & HA cases - Phenotypic match of isolates from index & lung case, but not with CNS case	 Unknown Index case had a soft-tissue abscess Environmental cultures negative Cultures of hands of health care personnel not performed
Schaal 1991, Schaal &Lee, 1992, Schaal et al. 1998	14	Post-op CABG, vascular or transplant surgery incisions - 14	 Infections developed post- operatively over a 7 year period during renovation All Nocardia farcinica patient isolates had a "characteristic susceptibility pattern" All isolates had "type A" pattern on pulsed field gel electrophoresis (PFGE) & were similar, however, variable 	- Unknown - <i>N. farcinica</i> not isolated from soil outside of hospital - Apeculated source is dust that entered hospital from shoes or open windows

Table I. Published reports addressing possible HA acquisition of Nocardia

Study	# of HA cases	Site infected	Evidence for acquisition	Potential sources
			chromosomal & plasmid bands were present; strains were not clonal - However, details on strain storage over the 7 years were not given, which may have affected the PFGE results - Environmental <i>N.</i> <i>farcinica</i> isolates from storeroom of the operating theatre had same susceptibility & similar PFGE patterns	
Sahathevan et al. 1991	7	Lung - 4 CNS & soft- tissue - 2 Dissem- 1	- Case cluster in a liver unit (5 liver transplants & 2 chronic liver disease) - The first 5 cases occurred in a 5 week period; the last two occurred 5 & 7 months after the first case	 Unknown Patient isolates had 3 different "biotypes" Hospital environmental cultures negative for Nocardia But presumed environmental source because renovation & increased dust generation was ongoing adjacent to the unit
Exmelin et al. 1996	3	Lung - 3	 Case cluster within 2 week window in same unit Patient isolates were identical via randomly amplified polymorphic DNA analysis (RFPD) & ribotyping 	 Unknown Not clear if infection was HA No environmental cultures All underwent bronchoscopy, questioned whether scope contaminated from case #1 & then served as the point source for cases 2 & 3
Wegner et al. 1998	5	Sternotomy site - 5	 Case control identified a particular anesthesiologist as a risk factor <i>N. farcinica</i> was isolated from hands of anesthesiologist in 7 independent cultures but isolates were not clonal per PFGE Anesthesiologist 	 Speculated person-to person But molecular evidence is not definitive All patients were discharged and returned with infection raising the possibility of non- HA infection

Study	# of HA cases	Site infected	Evidence for acquisition	Potential sources
			participated in 4/5 cases - Four/five patient isolates similar via ribotyping but not analyzed by PFGE -Nocardia not isolated from hospital environmental cultures	
Kachi et al. 2006	3	Lung - 2 Soft-tissue -1	- Cluster over 6 months on same ward - Patient isolates had similar RAPD pattern	- Unknown - Speculate possible HA based on RAPD analysis but all patients were in & out of hospital raising the possibility of non-HA infection -Nocardia not isolated from hospital environmental & health care personnel hand cultures
Minero et al. 2009	5	Unknown	 5/37 cases in review were "nosocomial" No details given Authors contacted but did not respond 	- Unknown