

From AAMI RD 52: Table 4—Monitoring guidelines for water purification equipment and distribution systems and dialysate

NOTE—Refer to footnote for an explanation of the use of Xs in the Specification column.

Tag #	Item to monitor	What to monitor	Special interval	Normal interval	Specification
V188	Sediment Filter	Pressure drop across the filter	NA	Daily	Pressure drop less than XXXX
V188	Sediment filter backwashing cycle	Backwash cycle timer setting	NA	Daily-beginning of the day	Backwash clock set to XX:XX
V189	Cartridge filter	Pressure drop across the filter	NA	Daily	Pressure drop less than XXXX
V191	Water softener	Product water softness	NA	Daily-end of the day	Hardness as calcium carbonate <1 grain/gal, unless otherwise specified by the manufacturer of the reverse osmosis equipment
V190	Water softener brine tank	Level of undissolved salt in tank	NA	Daily-end of the day	Salt level at XXX
V190	Water softener regeneration cycle	Regeneration cycle timer setting	NA	Daily-beginning of the day	Softener timer set to XX:XX
V196	Carbon adsorption beds	Product water free chlorine and/or total chlorine between the beds	NA	Prior to each patient shift	< 0.1 mg/L of total chlorine
V198	Chemical injection system	Level of chemical in the reservoir, injector function, value of the controlling parameter (e.g., pH)	NA	Daily	Chemical level in reservoir ≥ XXX; controlling parameter in range XX–XX
V200	Reverse Osmosis	Product water conductivity, total dissolved solids (TDS), or resistivity and calculated rejection		According to the manufacturer's recommendations (continuous monitors)	Rejection ≥ XX%
V200	Reverse Osmosis	Product and reject flow rates, and calculated recovery	NA	Daily (continuous monitors)	Product water flow rate > X.X gpm; recovery in the range XX–XX %
V202	Deionizers	Product water resistivity	NA	Continuous	Resistivity > 1 megohm-cm
V207	Ultrafilters	Pressure drops across the filter	NA	Daily	Pressure drop less than XXXX
V210	Water storage tanks	Bacterial growth and pyrogens	Weekly, until pattern of consistent compliance can be demonstrated	NA	Bacterial growth ≤50 CFU/mL; endotoxin ≤ 1 EU/mL
V213	Water distribution piping system	Bacterial growth and pyrogens	Weekly, until pattern of consistent compliance can be demonstrated	Monthly	Bacterial growth ≤50 CFU/mL; endotoxin ≤ 1 EU/mL
V214	UV Light source	Energy output	NA	Monthly	Light output > XXX
V216	Ozone generators	Concentration in the water	NA	During each disinfection	Ozone concentration > XXX
V217	Hot water disinfection systems	Temperature and time of exposure of the system to hot water	NA	During each disinfection	Temperature not less than XX °C; minimum exposure time at temperature ≥ XX minutes
V180	Dialysate	Bacterial growth and endotoxin in the dialysate	NA	Monthly rotated among machines so that at least two machines are tested each month and so that each machine is tested at least once per year	Bacterial growth ≤50 CFU/mL; endotoxin ≤ 1 EU/mL
V250	Dialysate	Conductivity and pH	NA	Each treatment	Conductivity within ± 5% of the nominal machine value; pH in the range 6.9–7.6

NOTE—It is not possible to specify universally acceptable operating ranges for each device listed in the table since some of these values will be system-specific. In those cases (denoted by Xs in the Specification column of the table), the facility should define an acceptable operating range based on manufacturer's instructions or measurements of system performance.

Source: 2004 Association for the Advancement of Medical Instrumentation ANSI/AAMI RD52:2004 *Dialysate for Hemodialysis*

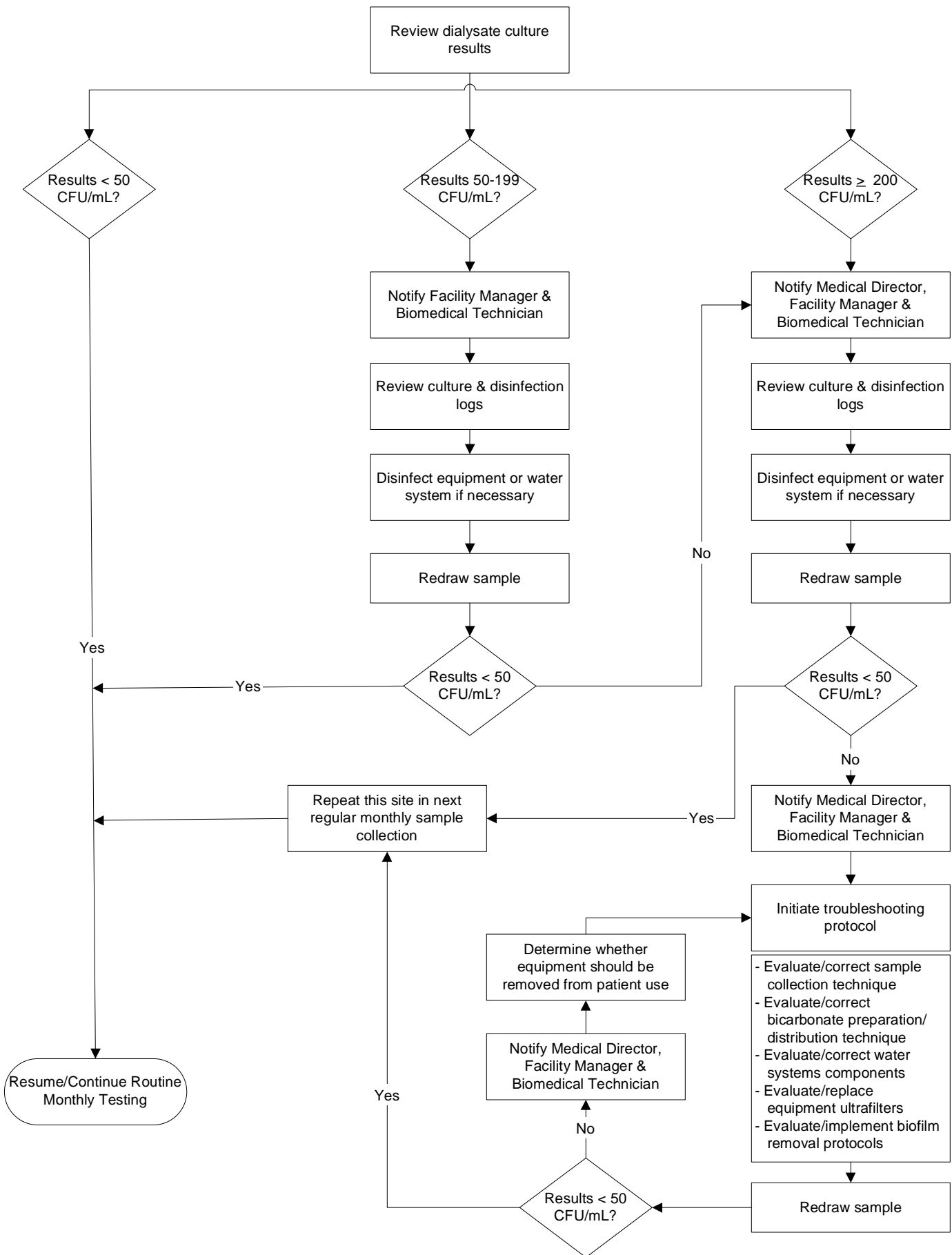


Figure 1 - Example of decision tree that can be used to evaluate culture results and initiate corrective action, if necessary