2025

Vaccination Toolkit

Developed by the Forum of ESRD Networks' Medical Advisory Council (MAC)

This toolkit for health providers and practitioners is a reference tool that provides information about vaccination requirements for kidney patients in the dialysis facility.

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This Toolkit is a guide, created by experienced professionals using the available evidence, produced by the Medical Advisory Council (MAC) of the Forum of ESRD Networks. The MAC anticipates revisions and additions to the Toolkit overtime. The Toolkit is meant as a resource and should not be referenced as a regulatory statement. As with other MAC Toolkits, this document is meant to help guide medical directors in meeting their obligations.

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INCREASING IMMUNIZATION RATES AMONG DIALYSIS PATIENTS

INTRODUCTION

The goal of this toolkit is to suggest quality improvement approaches that a facility can use to ensure care coordination for patients and increase immunization rates for influenza, pneumococcal disease, and hepatitis B among dialysis patients. The 2008 revision of the ESRD Conditions for Coverage (CfCs) mandates ongoing Quality Assessment and Performance Improvement (QAPI) projects within each facility and places responsibility for the direction of these projects upon the Medical Director. This toolkit provides information, tools and resources to effectively monitor, track, and manage immunization status among patients in the dialysis facility.

There have been a number of changes in the recommendations for vaccinating dialysis patients for hepatitis B, influenza, and pneumonia since the pamphlet, *Guidelines for Vaccinating Kidney Dialysis Patients and Patients with Chronic Kidney Disease*, which was generated by a Centers for Disease Control and Prevention (CDC) task force in response to a suggestion from the Forum of ESRD Networks in 2012 was published. A copy of this useful document is appended to the end of this toolkit. These changes will be discussed in detail in the next few pages. Some of the salient recommendations from the document, incorporated with some updated information, are summarized here.

- PCV 15 (Vaxneuvance) and PCV20 (Prevnar 20) have been available since 2021. In June of 2024, another PCV vaccine, PCV21 (Capvaxive; Merck Sharp & Dohme, LLC), also became available. PCV20 and PCV21 require one dose lifetime, eliminating the need for PPSV23 and PCV13 entirely when they become widely available. With PCV15, one still needs to vaccinate with PPSV23 but PCV13 is no longer required.
- As of November of 2017, a third recombinant hepatitis B vaccine has become available in the United States (HepB-CpG; sold as Heplisav-B made by Dynavax) and has now become the predominant vaccine for Hepatitis B in the United States.
- Currently the CDC gives an option of using a high dose influenza vaccine for people over the age of 65. The same guidelines hold true for patients on dialysis (only being restricted to patients over the age of 65). Although dialysis patients are often significantly immunosuppressed, high dose influenza vaccine is not recommended for dialysis patients under the age of 65, at this time.

(Reference: Teo EK, Lok ASF. Hepatitis B immunization in adults. In: UpToDate, (www.uptodate.com) Waltham, MA, 2019).

PNEUMOCOCCAL VACCINATION

Since the introduction of PCV20, pneumococcal vaccination has become simpler as long as it is available. With PCV20 and the newer PCV21 only one dose is required in order to complete pneumococcal vaccination in a lifetime. PCV21 adds coverage for eight new serotypes of the Pneumococcus bacteria, but it does not have certain other serotypes. It is assumed to cover more variants in adults while losing some coverage in groups with a high rate of serotype 4. Since the last few years have seen a number of novel pneumococcus vaccines become available, one wonders if the trend will continue, but it seems that there are at least 32 common serotypes of pneumococcus that can cause disease. At this time, it seems either PCV20 or PCV21 can be given to complete the pneumonia vaccinations. Since previous vaccines may have already been given and/or PCV20/PCV21 may not be available, the following principles for pneumococcal vaccination should be considered (see attached pneumonia vaccine protocol on page 23).

- PCV13 (Prevnar), PCV15, PCV20, PCV21 vaccines should only be given once in a lifetime.
- PPSV23 (Pneumovax) can be given as many as three times in a lifetime.
- Only one dose of PPSV23 is needed after the age of 65 (regardless of how many previous doses the patient has received)
- PCV13, PCV15, PCV20, PCV21 vaccines cannot be given until at least a full year has passed since PPSV23 vaccine was last given
- PPSV23 vaccine can be given after 8 weeks have passed since giving PCV13 vaccine, but one has to wait one year before giving it to a patient vaccinated with PCV15 unless there is an urgent indication (immunosuppression). In which case, it can be given after 8 weeks have passed
- PPSV23 vaccine is re-administered every 5 years after giving the first dose in patients less than 65 years of age (up to 3 doses)
- Only one dose of PPSV23 is required after vaccination with PCV15
- PPSV23 is no longer recommended after giving PCV13 vaccine, rather PCV20 or PCV21 should be given

(References: 1. Kobayashi M, et. al. Use of 21-valent pneumococcal conjugate vaccine among US adults: recommendations of the advisory committee on immunization practices- United States, 2024. MMWR 73, Sep 12, 2024. 2. Kobayashi M, et. al. Expanded recommendations for use of pneumococcal conjugate vaccines among adults aged ≥ 50 years: recommendations of the advisory committee on immunization practices – United States 2024. MMWR 74, Jan 9, 2025).

INFLUENZA VACCINATION

Influenza vaccination is recommended by the CDC to be given before the end of October in the United States. There is data to suggest that giving the vaccine earlier (i.e., August) will result in waning of its effectiveness towards the end of the influenza season. At this time, data is lacking to compare the effectiveness of the vaccine (especially at the end of the influenza season) if it is given in September as compared to giving it later in the season (e.g., October), although it is

important to note that influenza cases have been reported as early as October in some years. Regardless, if the patient has not had the influenza vaccine, it should be given even if it is late in the influenza season (e.g., February). High-dose influenza vaccine should be given to patients over the age of 65.

(Reference: Morbidity and Mortality weekly report August 29, 2024, Prevention and control of seasonal influenza with vaccines: Recommendations of the advisory committee on immunization practices – United States, 2024-25 influenza season).

HEPATITIS B VACCINATION

As of November of 2017, a third recombinant hepatitis B vaccine has become available in the United States (HepB-CpG; sold as Heplisav-B made by Dynavax). Heplisav-B contains a novel immunostimulatory adjuvant, and it requires the administration of only two doses (one month apart) as opposed to the three doses required for the other two vaccines in the general population. Vaccination is administered in the deltoid muscle, a site which may help to boost the immune response; patients on chronic anticoagulation may receive it subcutaneously, but immune responsiveness may be further impaired. Gluteal administration is not recommended. If seroconversion does not occur after the first vaccine series, a second attempt is indicated. If a second full hepatitis B vaccine series fails to induce an appropriate antibody response (defined as an antibody titer > 10 IU/L), the patient is considered a "non-responder" and does not need to be subjected to further doses of the vaccine. A preliminary study showed a higher antibody response rate with 3 doses of HepB-CpG compared to 4 doses of Energix-B in dialysis patients. A more recent study of 119 hemodialysis patients found that 89.3% of patients have Hep B surface antigen (HBsAb titers greater than 10 mIU/mL) after an average of 47 weeks of follow-up. In this study, 4 doses of HepB-CpG (20 mcg) were given at 0, 4, 8, and 16 weeks. Currently, most dialysis units in the United States have moved to using Heplisav-B as their sole vaccine against Hepatitis B infection. For the most part either 2 to 4 doses are given for the initial series. Once seroconversion occurs, patients no longer require monthly monitoring for surface antigenemia but can have such testing performed yearly with quantitative surface antibody status. A booster series of the vaccines is administered when titers fall below 10 IU/L. It is also important to refrain from monitoring recently vaccinated patients for hepatitis B surface antigen, since detectable antigen levels may persist for up to 2 weeks after vaccination, leading to unnecessary need for isolation and repeat testing. Because of the suboptimal seroconversion response among dialysis patients, it is indicated to immunize previously unvaccinated individuals with advancing chronic kidney disease to both hepatitis B and pneumococcal disease before dialysis dependence occurs.

COVID-19 VACCINATION FOR PATIENTS RECEIVING DIALYSIS THERAPY

The SARS-CoV-2 virus, which causes COVID-19 infection, first affected dialysis patients in China and South Korea in January and February 2020. By March 2020, the first cases of COVID-19 among US dialysis patients were reported in Washington state, Southern California, and New York City.

The first reported dialysis patient infected by COVID-19 and reported as a stand-alone case report was a 56-year-old non-diabetic man with ESRD secondary to IgA nephropathy undergoing thrice-weekly maintenance hemodialysis for 3 years, who presented to an urgent care, 3 emergency rooms, 1 cardiology clinic, and 2 dialysis centers in California and Utah. During this interval, he reported nausea, vomiting, diarrhea, and low-grade fevers but was not suspected of COVID-19 infection until he developed respiratory symptoms and was admitted to the hospital. Imaging studies upon admission were consistent with bilateral interstitial pneumonia. Within the first 24 hours, he deteriorated quickly and developed acute respiratory distress syndrome (ARDS), requiring intubation, increasing respiratory support, and he did not survive.[1]

After stringent infection prevention steps were taken, the incidence of in-center transmission of COVID-19 fell in US dialysis clinics.[2] It is unclear whether these measures had a bearing on the high mortality of COVID-19-infected dialysis patients.

Mass-vaccination of adults >18 years of age in the US started in December 2020. Despite reassurances by manufacturers regarding the safety and efficacy of the mRNA-based COVID-19 vaccines, emerging studies suggest varying degrees of post-vaccine immunity in patients with ESRD, including dialysis-dependent and especially kidney-transplanted patients.[3] Similarly, the rates of sero-protection after influenza vaccination in patients on dialysis are reported to vary from 33% to 80%.[2] The degree of immune response following a 2-dose series of mRNA vaccine appears much lower when kidney transplant recipients are considered, further indicating an urgency to encourage vaccination in advanced CKD and dialysis patients prior to transplantation.

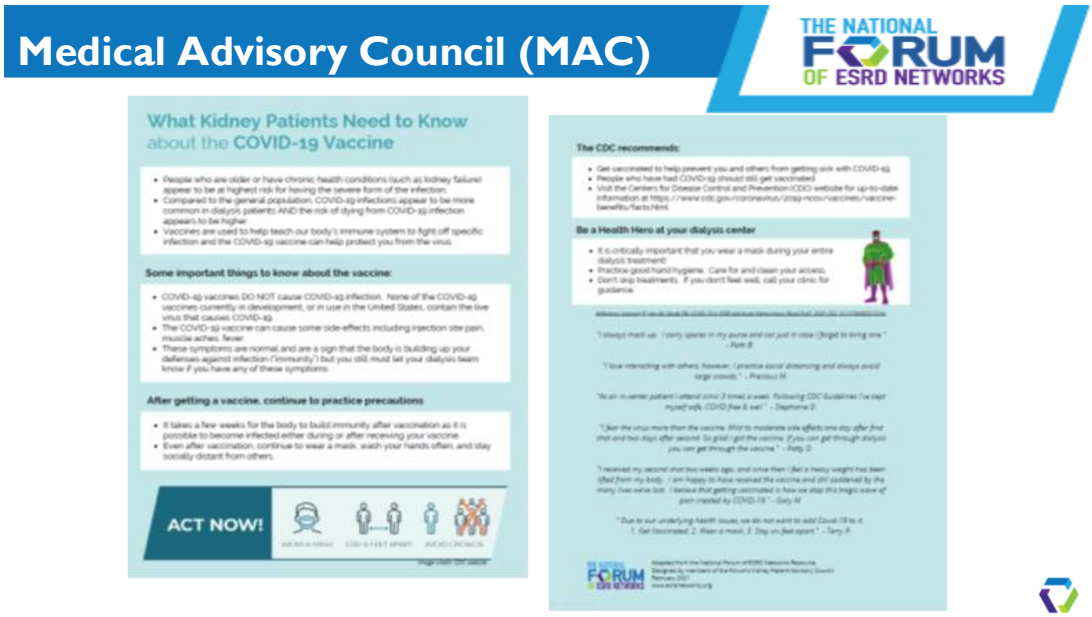
Clearly, the virulence of the SARS-CoV-2 virus has dramatically declined since the beginning of the pandemic, but it still can cause critical illness, especially in patients with end-stage kidney disease. In calendar year 2023, a total of 44,059 COVID-19 deaths were reported in the general population over the age of 65 in the United States.[4] A number that is still higher than the influenza deaths, but much closer than the years prior. This number has likely continued to decline since then. It is yet unclear how much vaccination for SARS-CoV-2 will be required in the future. One possibility is that the virulence will decrease to a point where it does not cause more severe illness compared to other coronaviruses, and vaccination would no longer be required. A more

likely possibility is the continued yearly recommendation to receive the vaccine (adopted for the yearly variant).

At this time, both Pfizer and Moderna continue to make yearly mRNA vaccines, which in the future may be combined with the influenza vaccine. For the 2024-2025 winter, a COVID-19 vaccine made by Novavax (protein subunit vaccine) also received emergency use authorization. All vaccines are administered intramuscularly. In May of 2025, the Advisory Committee on Immunization Practices recommended that all people over the age of 65 or those who are immunosuppressed receive a second SARS-CoV-2 vaccine 6 months after the last dose.[5] For the Novavax Vaccine in unvaccinated people between the ages of 12-64, 2 doses are recommended 3-8 weeks apart. Immunosuppressed patients who have received no prior COVID-19 vaccines should receive 4 doses of the vaccine at 0, 4, 8, and 26 weeks apart. Whether all ESRD patients will require bi-annual vaccination in the future is another possibility, as it seems the protection wanes after a few months.

Vaccine effectiveness for causing critical illness is reported to be 69% by 2 months and 32% after 6 months. At the current time, most dialysis units are not administering SARS-CoV-2 vaccines, which hopefully will change in the future. Risk factors for non-response to SARS-CoV-2 vaccine include age, frailty, lack of history of COVID-19 infection, immunosuppression with transplantation, and non-response to Hepatitis B vaccination.[6-10] The prevalence of long COVID in the ESRD population was 52.2% in one study.[11] The 2023-2024 mRNA SARS-CoV-2 vaccine was shown to have an effectiveness of 55% against hospitalizations and 71% against mortality in the ESKD population.[12] Cases of myocarditis and pericarditis after COVID-19 vaccination are rare but well described, mostly in young males. Subsequent doses in these patients should be avoided.

Figure 1: An educational flyer for the dialysis facilities to encourage COVID-19 vaccination (produced with permission from Dr. D. Landry) available for download from the Forum website.



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(Reference: https://www.cdc.gov/covid/media/pdfs/2025/04/Interim-Clinical-Consideration-for-Use-of-COVID-19-Vaccines.pdf).

RESPIRATORY SYNCYTIAL VIRUS VACCINATION

There are currently three vaccines that have been approved to prevent respiratory syncytial virus (RSV) infection, which are probably some of the newest available vaccines. Two, Pfizer's Abrysvo and Glaxo Smith Kline's Arexvy were approved in 2023, while Moderna's mResvia was approved in 2024. Currently, RSV vaccination is recommended by the CDC for all persons over the age of 75 years and for people between the ages of 60-74 at risk of severe RSV infection. Dialysis by itself is not an indication for RSV vaccination, but they clearly should be vaccinated if the above conditions hold true. Definitely, dialysis patients who have lung disease should be vaccinated.

Again, it would be of importance to provide this vaccine in the dialysis unit also, but currently, most dialysis units would not be prepared to do that. At this time, it is unclear if the risk of Guillain-Barré syndrome is higher with these vaccines than with others, but it is an area that is being further investigated.

(Reference: https://www.cdc.gov/vaccine-safety/vaccines/rsv.html#:~:text=Among%20adults%20ages%2060%20years,within%2042%20days%20after%20vaccination).

OTHER VACCINATIONS NOT ROUTINELY GIVEN DURING DIALYSIS

In general, recommendations for these vaccines in the dialysis population are the same as those for the general population, with most not having been studied extensively in this specific population of patients.

- Herpes zoster: The only vaccine against herpes zoster currently available is a recombinant zoster vaccine (RZV). A live zoster vaccine (LZV) is no longer available. RZV is recommended for patients over the age of 50 and consists of two dose series (at least 2 months apart). LZV was given to patients over the age of 60 and consisted of only one dose. RZV was introduced to the market after LZV was routinely given but has been shown to be more efficacious. As a result, LZV has been removed from the US market. RZV is given intramuscularly. Patients who are having active zoster infection should have their infection cleared prior to being vaccinated (some have suggested waiting as long as one year). If a patient has received LZV in the past, it is possible to revaccinate them with RZV (as it is more efficacious) after 8 weeks have passed.
  (Reference: Albrecht MA, Levin MJ. Vaccination for the prevention of shingles (herpes zoster). In: UpToDate, (www.uptodate.com) Waltham, MA, 2019).
- Tetanus, diphtheria, and acellular pertussis (Tdap): There are currently two available vaccines for adults (Adacel and Boostrix) given as 0.5 mL intramuscular injections. In addition, there are two vaccines intended for infants and children (Daptacel and Infantrix). For the most part, the adult vaccines are once-in-a-lifetime single injections, except that pregnant patients should receive a dose with each pregnancy. Repeat vaccinations are, in general, not harmful but not indicated except that a second dose of Adacel after > 8 years from the initial dose may be given routinely. Pertussis is a highly contagious disease causing a prolonged cough, which used to be seen only in children in the pre-vaccination era but is now not uncommon in adults. The incidence of pertussis infections is on the rise, thus making it more important to vaccinate everyone who is a candidate. Sustained immunity to pertussis following vaccination does not appear to be lifelong, necessitating at least one dose of Tdap after the age of 11.
  (Reference: Diphteria, tetanus toxoids, and acellular pertussis vaccine (DTaP and Tdap): Drug information. In: UpToDate (www.uptodate.com) Waltham, MA, 2019).

- In cases of wounds requiring prophylaxis, a dose of tetanus and diphtheria toxoid (Td) vaccine should be given unless there is a documented history of Tdap vaccination in the past 5 years. In addition, the Td vaccine should be routinely given every 10 years.
- Measles, mumps, and rubella (MMR) vaccine: Immunity rates to these diseases are high after just one dose of the vaccine and even higher after two doses. The vaccine is now routinely given to children at 12-15 months after birth and the second dose at 4-6 years of age. People who were born before 1957 are usually not vaccinated but can be assumed to have had natural infection and immunity. The immunity to these vaccines usually wanes somewhat with time, but protection from infection may be longer-lasting than serological conversion. The measles component of the vaccine is a live attenuated virus, while the other two components are recombinant vaccines. In cases of outbreaks of measles or rubella, two doses of the MMR vaccine, given at least 28 days apart, should be given to people who are incompletely immunized. However, in cases of mumps outbreaks, a third dose of the MMR vaccine should be given to people who have already had two complete doses of the vaccine previously.
  (Reference: Hibbard PL. Measles, mumps, and rubella immunization in adults. In: UpToDate (www.uptodate.com) Waltham, MA, 2019).
- One should follow recommendations for the general population for giving other vaccines to dialysis patients, including cholera, hepatitis A, haemophilus, papillomavirus, Japanese encephalitis virus, meningococcal, rabies, monkeypox, and yellow fever vaccines until further data.

(Reference: Krueger KM, Ison MG, Ghossein C. Practical guide to vaccination in all stages of CKD, including patients treated by dialysis or kidney transplantation. Am J Kidney Dis 2019 (epub ahead of print)).

VACCINATING THE TRANSPLANT PATIENT

Guidelines for vaccinating the kidney transplant patient are similar to those of the general population except for the following:

- Vaccination pre-transplant is preferred, if possible, as response rates may be better
- Vaccinating close contacts of transplant patients is important with regard to prevention
- Patients with a kidney transplant should avoid being vaccinated with a live attenuated vaccine as much as possible. These include the live herpes zoster vaccine, the MMR vaccine (the measles portion, but they are all combined), the Cholera vaccine, and the yellow fever vaccine.
- Vaccinations should be delayed until at least 3-6 months have passed since the kidney transplant, if possible, as the high-dose immunosuppression at the beginning of the transplant is likely making the immune response less likely to respond.

- Transplant patients who receive eculizumab should be vaccinated for the meningococcus vaccine at least 2 weeks prior to receiving the drug, if possible.

(Reference: Krueger KM, Ison MG, Ghossein C. Practical guide to vaccination in all stages of CKD, including patients treated by dialysis or kidney transplantation. Am J Kidney Dis 2019 (epub ahead of print)).

HOW TO USE THIS TOOLKIT

There are many different practice patterns, resources, and non-facility factors that contribute to the complexity of caring for dialysis patients. This toolkit can help the facility staff understand and improve its own processes. Each facility will need to determine its own goals, challenges, and solutions. Note that the Medical Director is charged with the leadership role in quality improvement, and that all personnel have important roles and responsibilities when it comes to managing patients' immunizations.

Below provides an example of a QAPI for immunizations. Below the QAPI example, there are supporting templates for tracking immunization performance improvement; these templates have been adapted from those used by the Safe and Timely Immunization Coalition, a project initiated by ESRD Network 6, in conjunction with Networks 11 and 15 and the support of Centers for Medicare & Medicaid Services (CMS). There is an Excel spreadsheet titled, *Immunization Data Collection Tool* on page 14, which can be used by the facility to record and update vaccination information on individual patients. It is recommended to save an electronic copy of *the Immunization Data Collection Tool* and update it periodically. Monthly updates on vaccination progress, may be generated with the including tools. To obtain additional information on QAPI development and maintenance, download the Forum of ESRD Network QAPI toolkit here.

Any materials can be downloaded, revised, printed, and distributed without restriction to meet the needs of the facility.

Quality Assessment & Performance Improvement Plan: Patient Immunization

Completing *and* implementing an effective data driven quality improvement plan is one way to drive sustained improvement. These plans are successful when they include each component of the quality improvement process and incorporate ongoing participation from the entire interdisciplinary team (IDT). Please use the following strategies as you develop a quality improvement plan for your facility:

- **Goal:** Define the desired outcome area currently not being met. **Example: 100% of eligible patients will receive the influenza immunization during the 2019-20 season.**

- **Problem Statement:** Define the problem that has prevented goal from being met, remembering that your facility could have multiple problem statements for one outcome area. **Example: Patients are refusing the influenza immunization.**

- **Multidisciplinary Team:** Determine the team members necessary to improve the outcome identified in the problem statement. **Example: medical director, nurse manager, social worker, governing body, attending nephrologists, dialysis nurses, patient care technicians.**

- **Root Causes:** Determine the underlying causes that have led to the problem.
  Example: Lack of patient education regarding the importance of the influenza immunization.

- **Action Plan Implementation Steps:** Determine what steps need to be taken to address the problem and its root causes. For each step, determine what team member(s) are primarily responsible for completing the task, what date the task should begin, and an estimated date for completing the task.
  Example: Step 1. Address barriers and misconceptions related to the influenza immunization.
  Responsible team member(s): Lucy Luck, RN and Joe Smile, PCT
  Start Date: October 1, 2019
  Estimated completed date: October 5, 2019, and incorporate into monthly care conferences.

- **Evaluation:** Determine a timeframe and structure for how each action plan step will be evaluated. During task evaluation, tasks may need to be revised or changed to facilitate further improvement. **Example: Bring list of current patients that have not received the influenza immunization to the monthly plan of care (POC) meeting for the team to review; and report changes in immunization status at POC meeting. Give positive feedback to patients when they receive the influenza immunization.**

VACCINATION ACTION PLAN TEMPLATE WORKSHEET

Use the Vaccination Action Plan Template in QAPI to formulate an action plan to improve the percentage of patients immunized within a specific timeframe. Additionally, this template is intended to identify facility barriers to increasing the number of vaccinated patients and to delineate staff roles and dates for achieving the facility immunization goal(s).

Problem Statement: ____% Currently meeting goal (updated monthly)	Facility Name: Facility Provider Number:
Goal for Improvement:	Person completing report: Date:
Date Required-Needed Resources:	I have reviewed this action plan
Root Causes-Barriers:	_____ (Medical Director Signature)
Actions Already in Place:	_____ (Administrator Signature)

Action Plan Implementation Steps	Team Members (Note responsible member)	Start Date	Estimated Completion Date	Checkpoint Dates	Date Completed	Comments (Status, outcomes, disposition, etc.)

VACCINATION ACTION PLAN – This is an EXAMPLE and not a complete Action Plan

Problem Statement:
Only 45% of the patients in the facility received the influenza immunization in 2018. The Healthy People 2020 goal is 90%.

Goal for Improvement:
Increase the percentage of patients receiving the influenza immunization by 45 percentage points in the 2019-2020 influenza season; rate will be equal to or greater than 90%.

Data Required/Needed Resources:
Number of patients receiving influenza immunization, tracking mechanism, personnel time and commitment to the project, patient education resources regarding the need for immunization, physician orders for immunization

Root Causes-Barriers:

- Lack of patient/staff education regarding the importance of vaccination of kidney patients
- Lack of documentation of immunizations including those given outside of the dialysis facility
- Refusal of vaccine by patients who do not want to receive the immunization.

Actions Already In Place:
The facility does not currently have an immunization program. Patients are encouraged to seek immunization outside the dialysis facility.

Facility Name: XYZ Dialysis
Facility Provider Number: 098765

Name of Person Completing Report:
Janie Doe

Date: May 1, 2019

I have reviewed this Action Plan:

_____
Medical Director

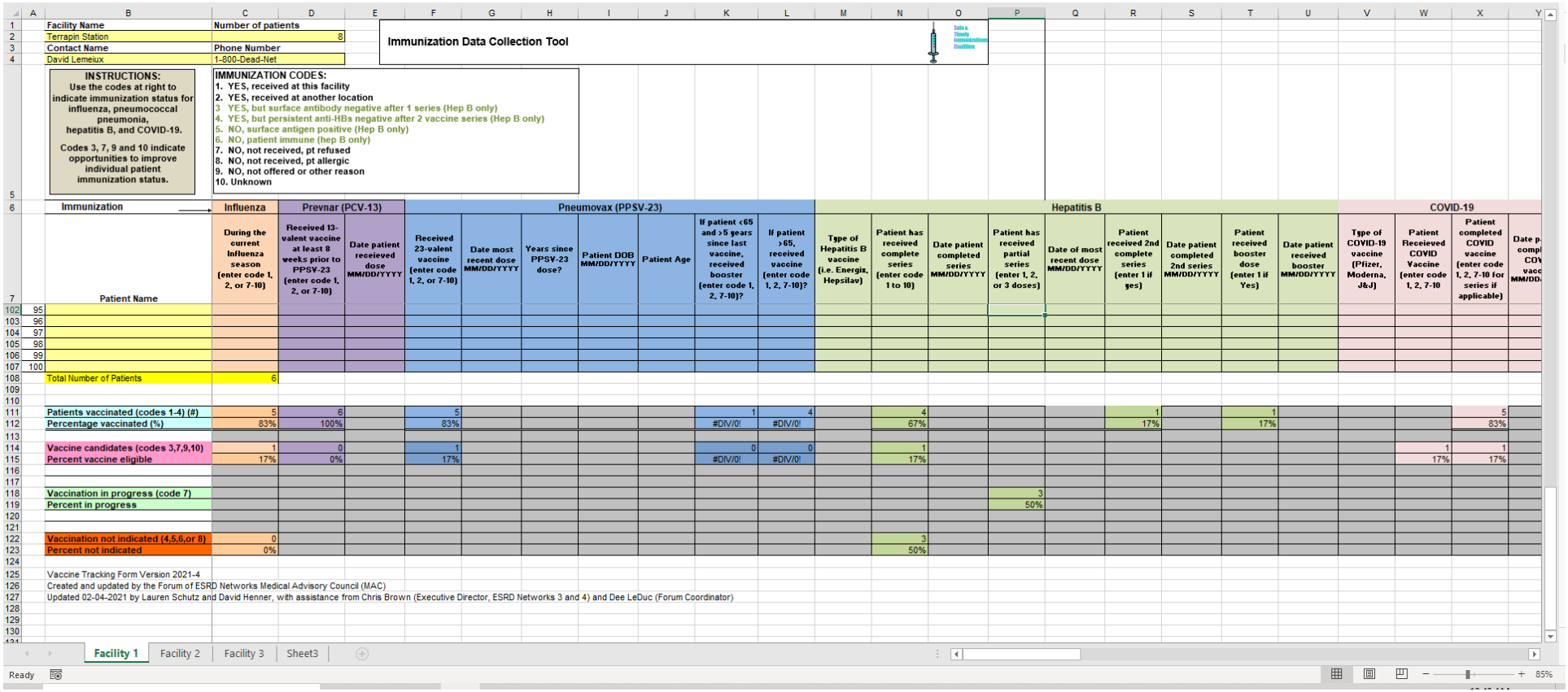
_____
Administrator

ACTION PLAN IMPLEMENTATION STEPS	RESPONSIBLE TEAM MEMBER	START DATE	ESTIMATED COMPLETION DATE	CHECKPOINT DATE	DATE COMPLETED	COMMENTS (STATUS, OUTCOMES, EVALUATION, ETC.)
Enlist the support of the Medical Director and the other facility Nephrologists for an influenza immunization program.	Facility Administrator	May 2, 2019	May 5, 2019	May 4, 2019	May 4, 2019	Medical Director and attending Nephrologists approve of an influenza immunization program within the facility. The MDs have agreed to participate on the QI team and are interested in discussing standing orders for immunization of their patients.
Establish current immunization status for all patients-did they receive the influenza immunization in the past year?	Facility RNs	May 10, 2019	May 30, 2019	May 20, 2019	May 28, 2019	Immunization status verified for all patients. The 45% rate thought to be accurate in the problem statement was found to be inaccurate. The actual immunization rate is 40%.
Develop an education program for patients and staff regarding influenza immunization-secure education materials, schedule learning sessions, and document all education efforts for both patients and staff. Determine when vaccine can be ordered and storage requirements. Confirm standing orders and consent requirements. Research documentation/tracking.	Facility Nurse Manager / Educator	May 30, 2019	Jun 30, 2019	Jun 25, 2019	Jun 30, 2019	Resources gathered for patient and staff education. Educational materials reviewed by the QI team. Staff education in-services scheduled to impress upon staff the importance of patient and staff immunization. Patient "Education Days" scheduled. Nurse Manager is looking into when vaccine can be ordered for the upcoming flu season and will confirm storage requirements. MDs contacted regarding standing orders. The Administrator is in the process of researching a documentation/tracking tool for all immunizations.

DATA TOOLS

IMMUNIZATION DATA COLLECTION TOOL

Download the Immunization Data Collection Tool excel spreadsheet from the Forum website and customize the form to your facility.



Immunization Data Collection Tool

Facility Name	Number of patients
Terrapin Station	8
Contact Name	**Phone Number**
David Lemeiux	1-800-Dead-Net

INSTRUCTIONS:
Use the codes at right to indicate immunization status for influenza, pneumococcal pneumonia, hepatitis B, and COVID-19.

Codes 3, 7, 9 and 10 indicate opportunities to improve individual patient immunization status.

IMMUNIZATION CODES:
1. YES, received at this facility
2. YES, received at another location
3. YES, but surface antibody negative after 1 series (Hep B only)
4. YES, but persistent anti-HBs negative after 2 vaccine series (Hep B only)
5. NO, surface antigen positive (Hep B only)
6. NO, patient immune (hep B only)
7. NO, not received, pt refused
8. NO, not received, pt allergic
9. NO, not offered or other reason
10. Unknown

Immunization	Influenza	Prevnar (PCV-13)		Pneumovax (PPSV-23)							Hepatitis B								COVID-19			
Patient Name	During the current Influenza season (enter code 1, 2, or 7-10)	Received 13-valent vaccine at least 8 weeks prior to PPSV-23 (enter code 1, 2, or 7-10)	Date patient received dose MM/DD/YYYY	Received 23-valent vaccine (enter code 1, 2, or 7-10)	Date most recent dose MM/DD/YYYY	Years since PPSV-23 dose?	Patient DOB MM/DD/YYYY	Patient Age	If patient <65 and >5 years since last vaccine, received booster (enter code 1, 2, 7-10)?	If patient >65, received vaccine (enter code 1, 2, 7-10)?	Type of Hepatitis B vaccine (i.e. Energix, Hepsilav)	Patient has received complete series (enter code 1 to 10)	Date patient completed series MM/DD/YYYY	Patient has received partial series (enter 1, 2, or 3 doses)	Date of most recent dose MM/DD/YYYY	Patient received 2nd complete series (enter 1 if yes)	Date patient completed 2nd series MM/DD/YYYY	Patient received booster dose (enter 1 if Yes)	Date patient received booster MM/DD/YYYY	Type of COVID-19 vaccine (Pfizer, Moderna, J&J)	Patient Receieved COVID Vaccine (enter code 1, 2, 7-10	Patient completed COVID vaccine (enter code 1, 2, 7-10 for series if applicable)	Date p compl COV vacc MM/DD/
95																						
96																						
97																						
98																						
99																						
100																						
Total Number of Patients	6																					
Patients vaccinated (codes 1-4) (#)	5	6		5					1	4		4				1		1				5	
Percentage vaccinated (%)	83%	100%		83%					#DIV/0!	#DIV/0!		67%				17%		17%				83%	
Vaccine candidates (codes 3,7,9,10)	1	0		1					0	0		1									1	1	
Percent vaccine eligible	17%	0%		17%					#DIV/0!	#DIV/0!		17%									17%	17%	
Vaccination in progress (code 7)														3									
Percent in progress														50%									
Vaccination not indicated (4,5,6,or 8)	0											3											
Percent not indicated	0%											50%											

Vaccine Tracking Form Version 2021-4
Created and updated by the Forum of ESRD Networks Medical Advisory Council (MAC)
Updated 02-04-2021 by Lauren Schutz and David Henner, with assistance from Chris Brown (Executive Director, ESRD Networks 3 and 4) and Dee LeDuc (Forum Coordinator)

Facility 1 | Facility 2 | Facility 3 | Sheet3

Ready

MONTHLY INTERVENTION TRACKING TOOL

Update this tracking tool on a monthly basis to evaluate progress towards your immunization goal(s) and to identify potential areas for improvement. Review your action plan progress with your IDT by using this tool each month during QAPI.

Facility Name:
Provider Number:
Month:
Due Date:

Date Action Plan Submitted: _____
Action Plan Accepted: ❑ Yes ❑No
If no, date action plan will be resubmitted: _____

Action Plan Progress

Action Plan Influenza Immunization Goal: _____%

A. Number of patients on facility census as of (date): _____

B. Of the patients on the facility census, number that were vaccinated for influenza this season (regardless of where the vaccine was given): _____

Remember to include patients who received their influenza vaccine somewhere other than this facility!

C. Percent of patients vaccinated (number of vaccinated patients/facility census x 100): _____ %

1. Outline the progress your facility has made toward implementation of each action plan step (be specific):

   _____
   _____
   _____

2. Has your facility made any changes to its immunization policies/procedures to achieve the facility immunization goal(s)?

   ❑ Yes ❑No

   If yes, what are the changes?

   _____
   _____

3. Has your facility instituted a program to educate **staff** about influenza immunization?

   ❑ Yes ❑No

4. Has your facility instituted a program to educate **patients** about influenza immunization?

   ❑ Yes ❑No

5. For patients who refuse the immunization (not based on medical contraindications) are you providing additional information/education related to the influenza immunization?

   ❑ Yes ❑No

   If yes, did any of these patients decided to be vaccinated?

   ❑ Yes ❑No

6. Has your facility reached the influenza immunization goal you set in your action plan?

   ❑ Yes ❑No

   If no, what actions are planned to achieve the immunization goal?

   _____
   _____
   _____
   _____

7. Does your facility have any additional issues or questions that you would like the Network to address regarding immunizations?

   ❑ Yes ❑No

   If yes, please be specific.

   _____
   _____
   _____

RESOURCES AND REFERENCES

QUALITY ASSESSMENT AND PERFORMANCE IMPROVEMENT (QAPI) FOR THE ESRD MEDICAL DIRECTOR

Medical Directors set the course for their dialysis center. Patients and staff members rely on the Medical Director to lead effectively. The CfCs released on 4/15/08 by CMS has updated the responsibilities of ESRD facility Medical Directors. As Pay for Performance (P4P) becomes a reality, it is increasingly important for facilities to achieve and sustain clinical performance targets in order to receive reimbursement. Medical Directors are encouraged to read carefully and become very familiar with the current Conditions.

The Medical Director has operational responsibility for the QAPI program and ensures that program data is used to develop actions to improve quality of care and must ensure that the facility's QAPI program is effectively developed, implemented, maintained, and periodically evaluated. The dialysis facility must maintain and demonstrate evidence of its QAPI program for review by CMS.

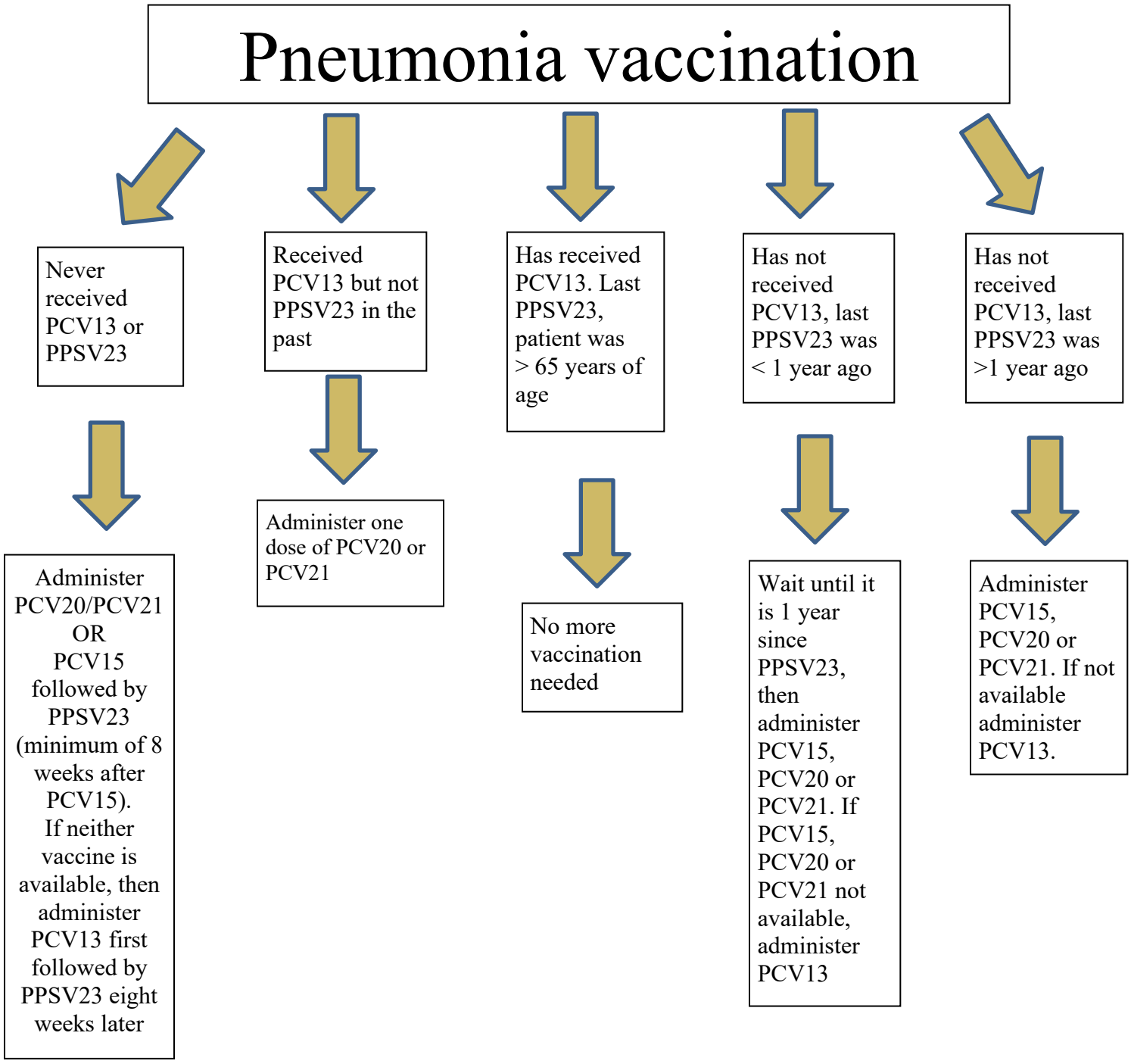
We encourage you to review the Forum's Medical Director Toolkit and QAPI Toolkit which provide greater detail about the Medical Director's role. The Toolkits are available as a free download at the Forum website.

The table below contains a breakdown of some Medical Director QAPI and responsibilities.

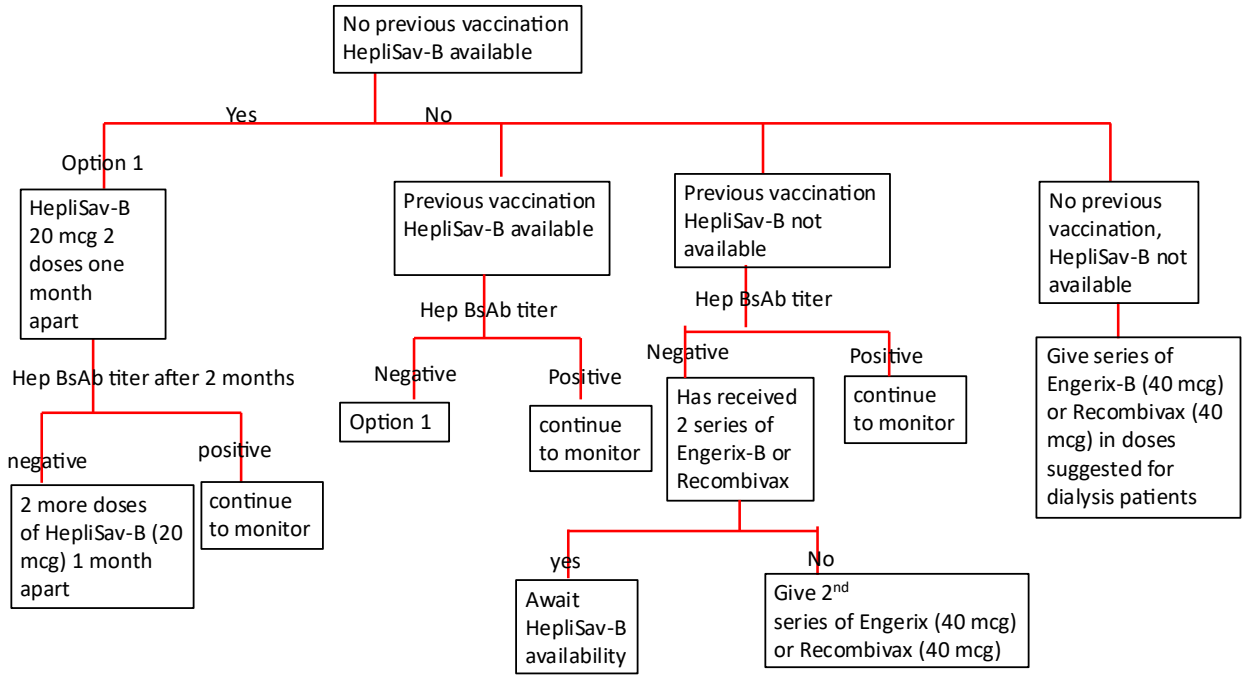
Patient Clinical Outcomes	**Reuse & Water Treatment**	**Patient Safety & Satisfaction**	**Staff Training**	**Involuntary Discharge of Patients**	**Oversight of Attending Physicians**	**Biohazard & Infection Control**	**Facility Policies & Procedures**
Adequacy of dialysis Nutritional status Mineral metabolism Anemia management Vascular access	Reuse program Deviations from AAMI standards (corrective action plan) Water treatment equipment Pt did not reach target weight	Medical injuries Medical errors Patient satisfaction Grievances	Ensure that staff receive appropriate education and training to competently perform job	Written and signed order from both Med. Dir. and attending physician prior to discharge (Note: The new *discharge/transfer process is very lengthy, specific, and progressive.)	Inform medical staff of facility P&P including QAPI Written and signed order from both Med. Dir. and attending physician prior to pt discharge Assure the attending physicians adhere to P&P	Adverse events Infection control issues	Participate in developing P&P Assure the attending physicians & other staff adhere to P&P

PNEUMONIA VACCINATION PROTOCOL

Use this Pneumonia Vaccination Protocol with your facility staff to determine timing, type and appropriateness of pneumonia vaccination administration. This protocol is available as a pdf download from the Forum website here.



HEPATITIS B VACCINE PROTOCOL



IMMUNIZATION RESOURCES AVAILABLE ON THE INTERNET

Numerous resources related to immunizations and immunization processes are available on the internet from the ESRD Networks as well as the Centers for Disease Control and Prevention (CDC), the national Immunization Action Coalition (IAC) and the Centers for Medicare & Medicaid Services (CMS).

ESRD NETWORK WEBSITES:

Network 1:	https://network1.esrd.ipro.org/
Network 2:	https://network2.esrd.ipro.org/
Network 3:	https://www.qirn3.org/home.aspx/
Network 4:	https://www.qirn4.org/Home.aspx
Network 5:	https://www.qualityinsights.org/qirn5
Network 6:	https://network6.esrd.ipro.org/
Network 7:	https://www.hsag.com/es/esrd-networks/esrd-network-7/
Network 8:	https://quality.allianthealth.org/topic/esrd-nw8/
Network 9:	https://network9.esrd.ipro.org/
Network 10:	https://esrd.qsource.org/
Network 11:	http://www.midwestkidneynetwork.org/
Network 12:	https://esrd.qsource.org/
Network 13:	https://www.hsag.com/esrdnetwork13

Network 14:	https://quality.allianthealth.org/topic/esrd-nw14/
Network 15:	https://www.hsag.com/en/esrd-networks/esrd-network-15/
Network 16:	https://comagine.org/esrd
Network 17:	https://www.hsag.com/en/esrd-networks/esrd-network-17/
Network 18:	https://www.hsag.com/en/esrd-networks/esrd-network-18

OTHER RESOURCES AVAILABLE:

Centers for Disease Control and Prevention (CDC) – Vaccination Information Sheets (VIS) are required to be provided to patients and staff receiving an immunization. https://www.cdc.gov/vaccines/hcp/vis/index.html

Centers for Disease Control (CDC) MMWR August 23, 2019 - Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices – United States, 2019-2020 Influenza Season.
https://www.cdc.gov/mmwr/volumes/68/rr/pdfs/rr6803-H.pdf

National Immunization Program (http://www.cdc.gov/vaccines/) - This is a portion of the CDC Web site that is specifically geared to healthcare professionals and has a plethora of immunization resources.

Immunization Action Coalition (http://www.immunize.org) - Vaccination information for healthcare professionals including a directory of available resources across the Internet. This site contains the ability to subscribe for immunization alerts and new practice recommendations.

CDC Guidelines for Vaccinating Kidney Dialysis Patients and Patients with Chronic Kidney Disease (December 2012, reviewed July 2015)
https://www.cdc.gov/vaccines/pubs/downloads/dialysis-guide-2012.pdf

Under CMS contract #HHSM-500-2006-NW015C, ESRD Network #15 created a spreadsheet-based immunization tracking form, the Multiple Immunization Monitoring Instrument (MIMI). This resource has been updated by the Forum of ESRD Networks and is available on the Forum of ESRD Networks website at
https://esrdnetworks.org/toolkits/professional-toolkits/vaccination-toolkit/.