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erm • project risk mgmt • bcr • health & safety • rmis • claims admin • esg • iprm • compliance • policy mgmt • internal audit



WELLNESS

**RISK** UNDER  
**ONE ROOF**

Confidential

# Riskconnect and Wellness: Royal Caribbean Group Finds Opportunity by Thinking Outside the Box

**Carlos Junquera**

*Systems and Analytics Manager, Royal Caribbean Group*





**RISK** UNDER  
ONE **ROOF**



Carlos Junquera (Pre COVID-19)  
aka “Caribbean”





**RISK** UNDER  
ONE **ROOF**



## Riskconnect and Wellness: Royal Caribbean Group Finds Opportunity by Thinking Outside the Box





**RISK** UNDER  
ONE **ROOF**

# 2022

Company Overview

Confidential





**5**

UNIQUE  
BRANDS

**63**

EXTRAORDINARY  
SHIPS

**40**

HOMEPORTS

**55**

EMBARKATION  
TERMINALS

**1,000**

DESTINATIONS  
WORLDWIDE

**~7M**

GUESTS TO  
SERVE





# Risk Management Overview – Risk Under One Roof



**Crew Medical**



**Crew & Guest  
Claims, Litigation,  
and Employee  
Legal Services**



**Systems & Compliance,  
Finance, and  
Network Development**



**Insurance**

# Risk Management – Legacy Systems

- Prior to 2017 the Risk Management teams along with a few others outside of Risk Management each used a different system
  - Inefficient
  - Data silos
  - Limited interface capabilities
  - Limited automation capabilities



# Risk Management and Riskonnect Risk Under One Roof

- In 2017, we replaced our legacy systems with Riskonnect
- Implementation included Claims Management as well as Safety and Loss Prevention
- At the same time, we custom built our current Case Management system leveraging the Riskonnect Claims module, now used by our Crew Medical, Guest Claims, and Legal teams



# *Flying High*





# Risk Management and Riskonnect – Thinking Outside the Box

- Ship Disembarkation Review Process
  - Enhanced ship to shore communications
  - Facilitated the disembarkation process by engaging Crew Medical
  - Streamlined documentation
- Case Referral and Service Request Process
  - Monitor agent/provider performance
  - Control costs prior to services being rendered
  - Manage care by health outcomes



**RISK** UNDER  
**ONE** **ROOF**

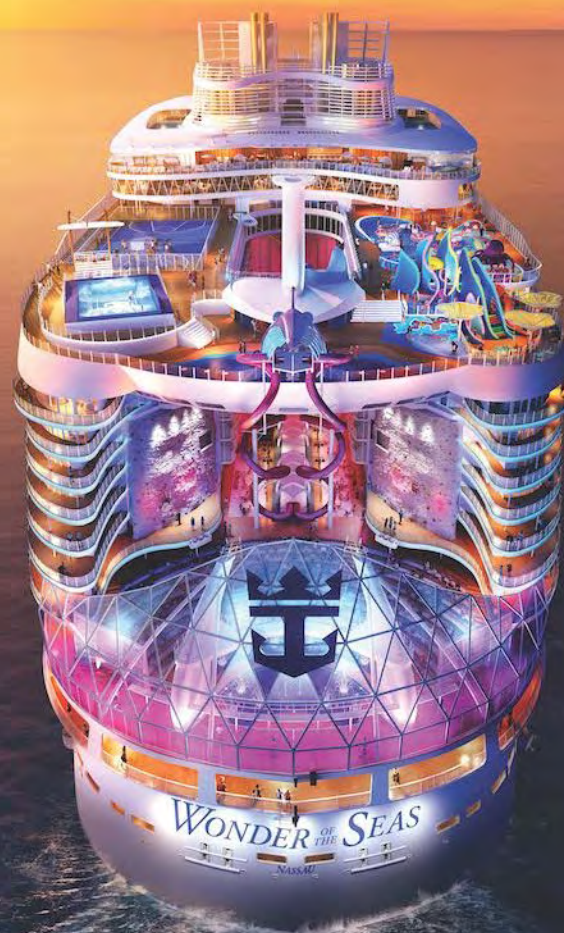


*Confidential*



# The Cruise Company

**RISK** UNDER  
ONE **ROOF**





WARNING:  
BORING CONTENT







# Maritime Law – Jones Act

- Crew is a “ward” of the Captain or Ship Owner
- Maintenance and Cure provisions
- “Cure” - Cover illnesses and injuries that manifest while in service of the ship
- “Maintenance” – Must provide for the crew member just as if on the ship while on medical leave
- Must treat until “Maximum Medical Improvement”
- No benefit plan or limitations





**AND NOW BACK TO OUR REGULARLY  
SCHEDULED PROGRAMMING**

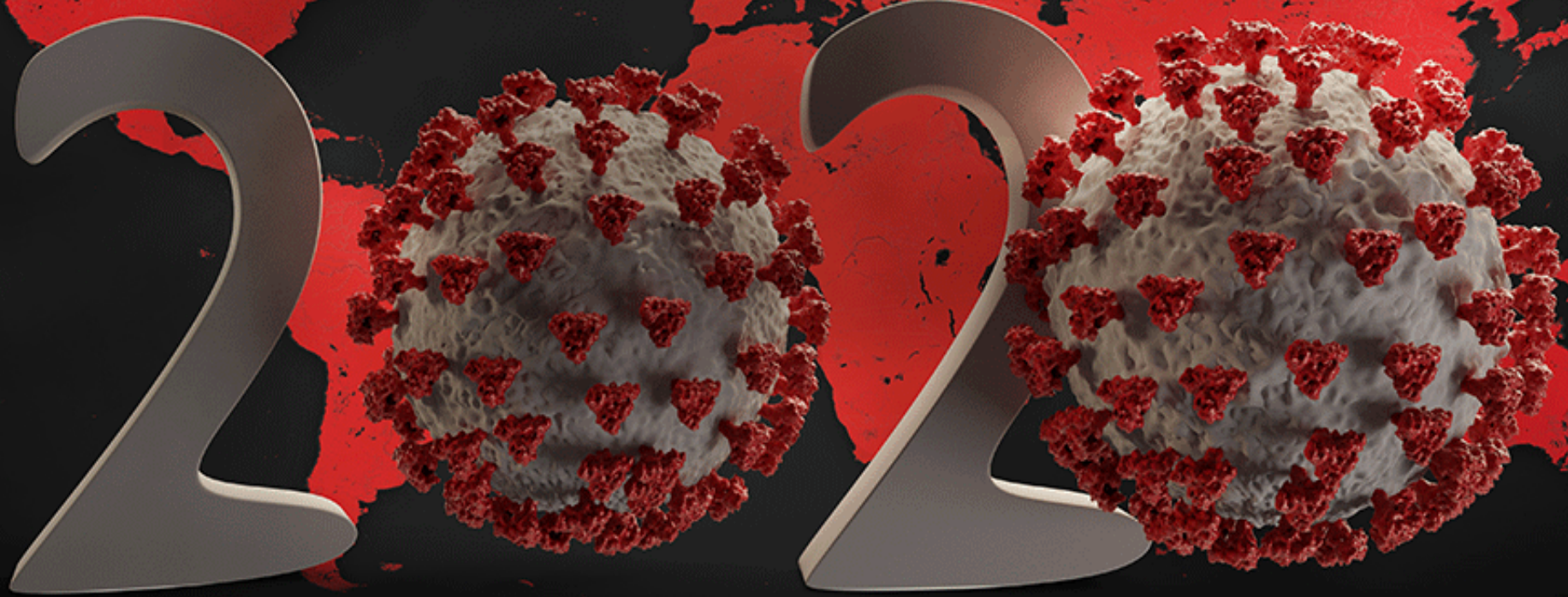


# Soaring





**RISK** UNDER  
ONE **ROOF**





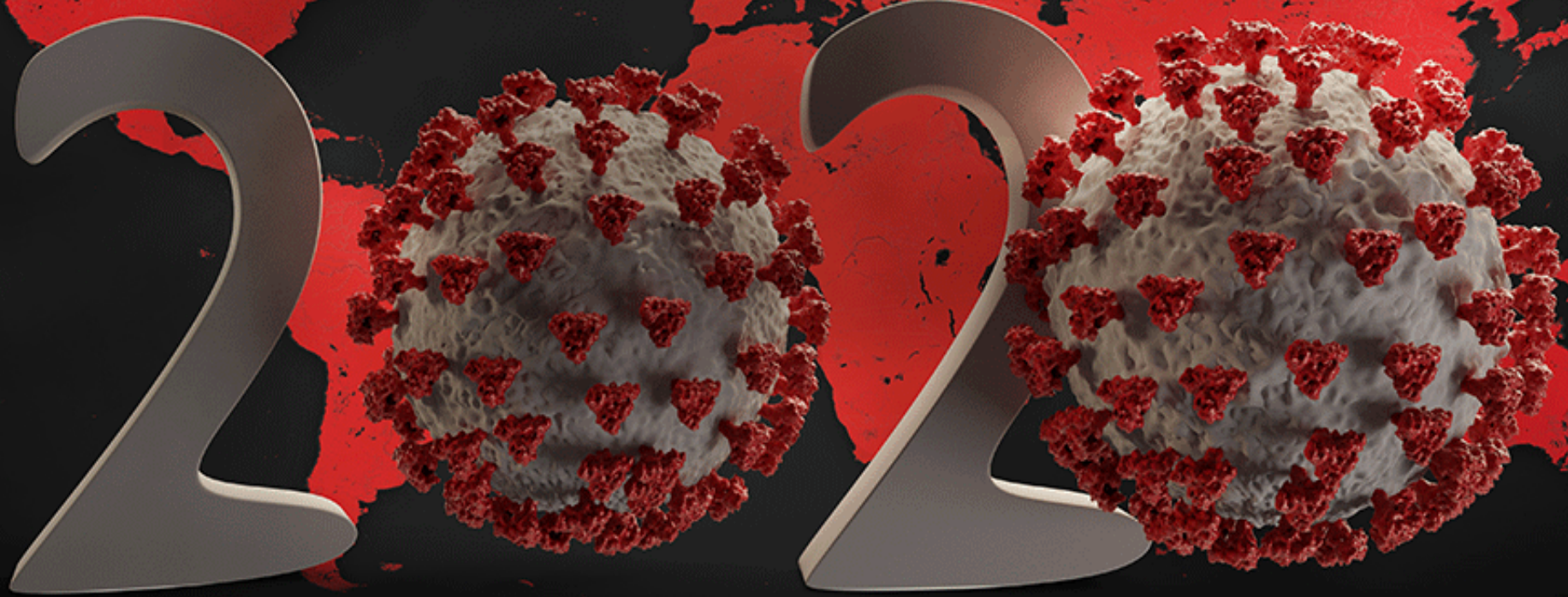


# LA BREA





**RISK** UNDER  
ONE **ROOF**





# Coronavirus

dead  
coronavirus in U.S.



**CREW COVID-19  
QUESTIONNAIRE**



**RISKONNECT  
ALGORITHM**



**MEDICAL  
INTERVENTION**





# *Limitless Possibilities*





# Shipboard Medical Management of Our Crew

- Medical care is managed and coordinated by shipboard medical team
- Ship Doctor acts like a “PCP”
- Shoreside Referrals to Specialists while in port





# Challenges to Providing Medical Care

- We hire from 90 countries
- We employ nearly 100,000 crew members, with 45,000-50,000 onboard at any given time
- Diverse population with challenges to healthcare, including:
  - Cultural
  - Religious
  - Dietary
  - Different outlooks on medical care
- Medical team turnover





# Understanding Our Medical Risk

- Analyzed crew population to identify endemic conditions
- Analyzed claims data to identify high volume claims by condition
- Found the following conditions were either endemic or associated with high volume/high-cost claims:
  - Diabetes
  - Hypertension
  - Hyperlipidemia
  - Obesity
  - Varicose Veins







# Path to Wellness

- Using nationally recognized medical guidelines, we designed clinical pathways
- Identified parameters to stratify crew by risk categories:
  - Stable
  - Elevated
  - Critical
- Levels of intervention for each condition were identified based on the risk categories





# Wellness Program Components

- The program is comprised of 7 components:
  - Archiving of Crew Wellness Data
  - Condition and Severity Designation
  - Pre-populated Wellness Plans
  - Wellness Plan Notifications
  - Compliance Monitoring
  - Condition Monitoring
  - Dynamic Reporting







# Wellness Program and Riskonnect

## ■ Condition Specific Data Variables

- For each condition we monitor different data variables comprised of Symptoms, Behaviors, Vitals and Testing. Riskonnect then analyzes the data entered and assigns a risk category. We'll review diabetes as an example.

Diagnosis:	Diabetes (Type II Only)		Stable	Elevated Risk	Critical
Condition Metrics:	Symptoms	Headache	<i>rare</i>	<i>recurring</i>	<i>constant/severe</i>
		Blurred Vision	<i>mild</i>	<i>moderate</i>	<i>severe</i>
		Polyuria	<i>none</i>	<i>moderate</i>	<i>excessive</i>
		Polydypsia	<i>none</i>	<i>moderate</i>	<i>severe</i>
		Weight Loss	<i>none</i>	<i>-/= 3kg.</i>	<i>&gt;3kg.</i>
		Nueropathy	<i>none</i>	<i>paresthesia</i>	<i>open wounds</i>
	Behaviors	Medication Compliance	<i>Compliant</i>	<i>non-compliance (1 day)</i>	<i>non-compliance (&gt;/= 2 days)</i>
	Vitals	BMI (Body Mass Index)	<i>35</i>	<i>36-40</i>	<i>&gt;/=41</i>
	Testing	Fasting Glucose	<i>&lt;118 mg%</i>	<i>119-150 mg%</i>	<i>&gt;150 mg%</i>
		HbA1c	<i>&lt;/= 5.8%</i>	<i>5.9%-6.3%</i>	<i>&gt;6.4%</i>
		Creatinine	<i>&lt;/=1.2</i>	<i>&gt;1.2 to 1.4</i>	<i>&gt;1.4</i>
		Urinalysis (Proteinuria)	<i>Negative (chg to 0)</i>	<i>1-2+</i>	<i>&gt;3+</i>
		Urinalysis (Glycosuria)	<i>Negative (chg to 0)</i>	<i>1-2+</i>	<i>&gt;3+</i>



# Wellness Program and Riskonnect

## ■ Wellness Program Condition Matrix – Levels of Intervention

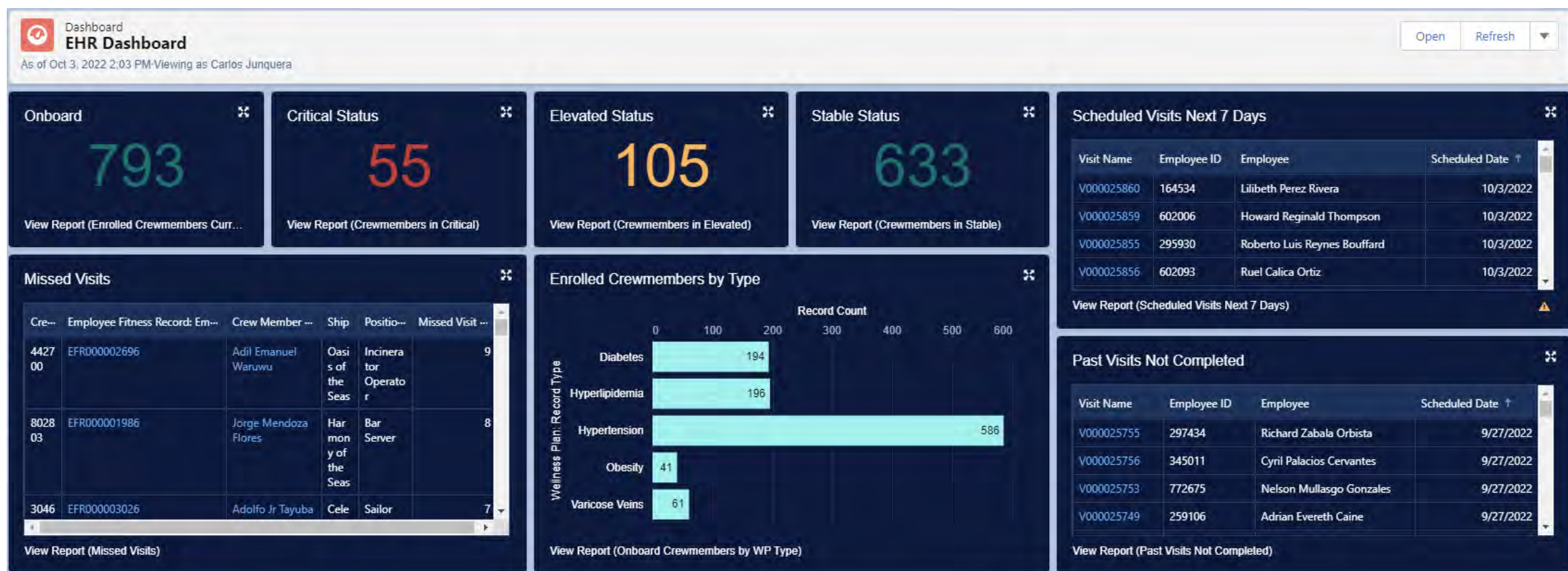
- Levels of interventions were identified for each condition based on the risk category of the crew member. Riskonnect auto-schedules the medical visits according to the condition and risk category.

Wellness Plan / Compliance Monitoring Panel				
		Stable	Elevated Risk	Critical
Appointments	General Visit / Vitals	Quarterly	Monthly	Weekly
	Nephrology Consult	Annual	As needed	Req Disembarkation
	Cardiology Consult	Annual	As needed	Req Disembarkation
	Ophthalmology	Annual	As Needed	As Needed



# Wellness Program and Riskonnnect

## ■ Employee Health & Wellness Application – Home Page





# Wellness Program and Riskonnect

## ■ Employee Health & Wellness Application – Employee Fitness Record

Logged in as AD Doctor Sr (ad\_doctorsr@rccl.com.full) | Sandbox: FULL | [Log out as AD Doctor Sr](#)

Search...

Employee Health &... Employee Fitness Home Employee Fitness Records Actions

Employee Fitness Records  
All

7 items • Sorted by Employee Fitness Number • Filtered by All employee fitness records - Employee Status • Updated a minute ago

Search this list...

	Employee Fitness Number ↑	Crew Member Full Name	Crew Member Num...	Employee Fitness Estab...	Employee Status	Ship	Ship Name
1	<a href="#">EFR000000388</a>		277887	9/8/2021	Active	Adventure of the Seas	<a href="#">Adventure of the Seas</a>
2	<a href="#">EFR000000455</a>		330603	9/8/2021	Active	Adventure of the Seas	<a href="#">Adventure of the Seas</a>
3	<a href="#">EFR000001018</a>		893614	9/8/2021	Active	Adventure of the Seas	<a href="#">Adventure of the Seas</a>
4	<a href="#">EFR000001104</a>		253588	9/8/2021	Active	Adventure of the Seas	<a href="#">Adventure of the Seas</a>
5	<a href="#">EFR000001434</a>		922558	9/8/2021	Active	Adventure of the Seas	<a href="#">Adventure of the Seas</a>



# Wellness Program and Riskonnect

## ■ Employee Health & Wellness Application – Employee Fitness Record

Logged in as AD Doctor Sr (ad\_doctorsr@rcd.com.full) | Sandbox: FULL | [Log out as AD Doctor Sr](#)

Employee Health &... Employee Fitness H...

Employee Fitness Records  
All

7 items • Sorted by Employee Fitness Number • Filtered by All employees

	Employee Fitness Number	Crew Member
1	EFR000000388	
2	EFR000000455	
3	EFR000001018	
4	EFR000001104	
5	EFR000001434	
6	EFR000001501	
7	EFR000002396	

### New Employee Fitness Record

**Details**

Count Number of Daily BP Visits: 0

Owner: AD Doctor Sr

Employee Fitness Number:

Employee Fitness Established Date: 10/3/2022

\* Crew Member Name: Search Contacts...

Crew Member Number: This field is calculated upon save

Employee Status: InActive  
This field is calculated upon save

Employee Fitness Status: Active

Status Effective Date: 10/3/2022

Appointment Compliance: This field is calculated upon save

Ship Name: Search Hierarchy...

Cancel Save & New Save

Chatter Feed Recent Items



# Wellness Program and Riskonnect

## ■ Employee Health & Wellness Application – Employee Fitness Record

Employee Fitness Record  
**Konnect 2022 Test Test**

[Edit](#)
[Enroll in Wellness Plan](#)
[Conduct Employee Visit](#)
[HELP!](#)

DetailsFiles

Details

Count Number of Daily BP Visits

0

Owner

AD Doctor Sr

Employee Fitness Number

EFR000003506

Employee Fitness Established Date

10/3/2022

Crew Member Name

Konnect 2022 Test Test

Crew Member Number

1234567

Employee Status

Active

Employee Fitness Status

Active

Status Effective Date

10/3/2022

Appointment Compliance

Ship Name

Adventure of the Seas

Personal Demographic and Employment Data

Date of Birth

9/3/1996

Age

26

Gender

Female

Wellness PlansSupplementary Health Infor...

Wellness Plans (0)

Visits (0)

Latest Visit Data

BMI

BMI - Date Last Updated

Cholesterol mg/dl

Cholesterol mg/dl - Date Last Updated

Blood pressure SYSTOLIC

Blood pressure SYST - Date Last Updated

Blood pressure DIASTOLIC

Blood pressure DIAS - Date Last Updated

System Information

Created By

AD Doctor Sr, 10/3/2022 6:26 PM

Last Modified By

AD Doctor Sr, 10/3/2022 6:26 PM

Employee Fitness Established Date

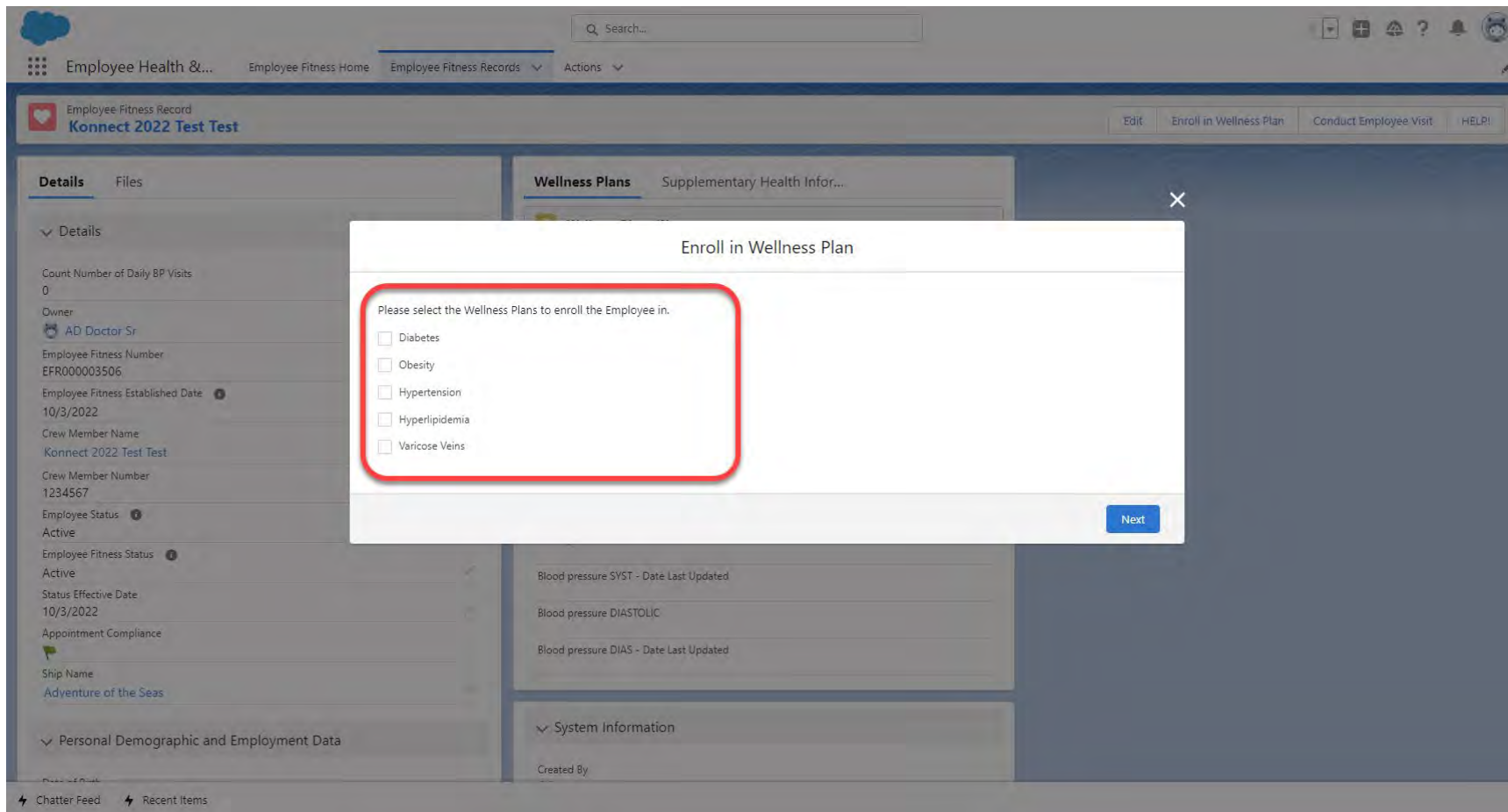
10/3/2022

Confidential



# Wellness Program and Riskonnect

## ■ Employee Health & Wellness Application – Enrolling in a Wellness Plan



The screenshot displays the Riskonnect Employee Health & Wellness Application interface. A modal dialog box titled "Enroll in Wellness Plan" is open, prompting the user to select wellness plans for enrollment. The dialog box contains a list of conditions with checkboxes: Diabetes, Obesity, Hypertension, Hyperlipidemia, and Varicose Veins. A red rectangle highlights this list. The background shows the "Employee Fitness Record" for "Konnect 2022 Test Test" with various tabs and fields.

**Enroll in Wellness Plan**

Please select the Wellness Plans to enroll the Employee in.

- ☐ Diabetes
- ☐ Obesity
- ☐ Hypertension
- ☐ Hyperlipidemia
- ☐ Varicose Veins

**Next**

**Employee Health & Wellness Application**

Employee Fitness Record  
**Konnect 2022 Test Test**

Details Files Wellness Plans Supplementary Health Infor...

Details

Count Number of Daily BP Visits  
0

Owner  
AD Doctor Sr

Employee Fitness Number  
EFR000003506

Employee Fitness Established Date  
10/3/2022

Crew Member Name  
Konnect 2022 Test Test

Crew Member Number  
1234567

Employee Status  
Active

Employee Fitness Status  
Active

Status Effective Date  
10/3/2022

Appointment Compliance

Ship Name  
Adventure of the Seas

Personal Demographic and Employment Data

System Information

Created By

Chatter Feed Recent Items



# Wellness Program and Riskonnect

## ■ Employee Health & Wellness Application – Wellness Plan Visit

**Enroll in Wellness Plan**

Complete the appropriate information and click 'Next' to proceed.

**Symptoms**

Headache --None--	Blurred Vision --None--
Polyuria --None--	
Nueropathy --None--	
Polydypsia --None--	
Weight - Unit of Measurement --None--	

**Vitals**

BMI (Body Mass Index)

**Testing**

Fasting Glucose mg%	HbA1c (%)
<input type="text"/>	<input type="text"/>
Creatinine	Urinalysis (Glycosuria)
<input type="text"/>	<input type="text"/>

**Next**

**Employee Health & Wellness Application – Wellness Plan Visit**

**Employee Fitness Record**  
**Konnect 2022 Test Test**

**Details** Files

Details

Count Number of Daily BP Visits  
0

Owner  
AD Doctor Sr

Employee Fitness Number  
EFR000003506

Employee Fitness Established Date  
10/3/2022

Crew Member Name  
Konnect 2022 Test Test

Crew Member Number  
1234567

Employee Status  
Active

Employee Fitness Status  
Active

Status Effective Date  
10/3/2022

Appointment Compliance

Ship Name  
Adventure of the Seas

Personal Demographic and Employment Data

Created By

Chatter Feed Recent Items



# Wellness Program and Riskonnect

- Employee Health & Wellness Application – Stratification & Follow-Up Visit

**Enroll in Wellness Plan**

**Diabetes Status**

Based on the data entered, the current status for the crew member's condition(s) is below.

Confirm whether or not you agree with the applied status' accuracy based on your observation and examination of the crew member. If you do not agree, please update the status and explain why.

**Automated Status - Critical**

Wellness Plan / Compliance Monitoring Panel based on the Status / adjusted Status.

\*Is the automated Status deemed accurate?

☐ Yes

☐ No

**Appointments**

General Visit / Vitals - *Weekly*

Cardiology Consult - *As needed*

**Enroll in Wellness Plan**

Based on the Diabetes Status of **Elevated Risk** the next Scheduled appointment is suggested to be **October 8, 2021**

If this scheduled date requires amending please enter a new date below, else leave blank and click 'Next':

Amended next Appointment date for Diabetes

Based on the Obesity Status of **Critical** the next Scheduled appointment is suggested to be **September 9, 2021**

If this scheduled date requires amending please enter a new date below, else leave blank and click 'Next':

Amended next Appointment date for Obesity

Based on the Hypertension Status of **Critical** the next Scheduled appointment is suggested to be **September 9, 2021**

If this scheduled date requires amending please enter a new date below, else leave blank and click 'Next':

Amended next Appointment date for Hypertension

Based on the Hyperlipidemia Status of **Elevated Risk** the next Scheduled appointment is suggested to be **December 8, 2021**

If this scheduled date requires amending please enter a new date below, else leave blank and click 'Next':

Amended next Appointment date for Hyperlipidemia

Previous Next

# Wellness Program and Riskonnect

## ■ Employee Health & Wellness Application – Employee Fitness Record

Sandbox: FULL

Search...

Employee Health &... Employee Fitness Home Employee Fitness Records Reports Dashboards Actions Contacts Files Weekly Metrics Custom History

Employee Fitness Record

Edit Delete Enroll in Wellness Plan Conduct Employee Visit HELP! Blood Pressure Quick Entry

The current level for Diabetes is **Critical** and *disembarkation* should be considered.

**Details** Files

Details

Count Number of Daily BP Visits  
0

Owner  
RCL - Sys Admin - RCL

Employee Fitness Number  
EFR000003505

Employee Fitness Established Date  
7/29/2022

Crew Member Name

Crew Member Number  
927344

Employee Status  
Active

Employee Fitness Status  
Active

Status Effective Date  
7/29/2022

Appointment Compliance

Missed Visit per Contract Count

**Wellness Plans** Supplementary Health Infor...

Wellness Plans (3)

WP000005299  
Record Type: Hypertension  
Last Visit Date: 9/8/2022  
Current Grading:

WP000005300  
Record Type: Diabetes  
Last Visit Date: 9/8/2022  
Current Grading:

WP000005306  
Record Type: Varicose Veins  
Last Visit Date: 9/8/2022  
Current Grading:

View All

**Visits (3+)**

V000025581  
Category of Visit: Hypertension  
Status: Scheduled  
Record Type: Scheduled Visit

V000026032  
Category of Visit: Varicose Veins  
Status: Scheduled  
Record Type: Scheduled Visit

**Diabetes Monitoring Panel**

Diabetes Confirmed Grading  
Critical

**HbA1c Review Report**

Sum of HbA1c %

20  
16  
12  
8  
4  
0

8/23/2022 9/8/2022

Date Visit Completed

View Report As of Today at 12:14 PM

**Hypertension Monitoring Panel**

Hypertension Confirmed Grading

Chatter Feed Recent Items



# Wellness Program and Riskonnect

## ■ Employee Health & Wellness Application – Employee Fitness Record

Sandbox: FULL

Search...

Employee Health &... Employee Fitness Home **Employee Fitness Records** Reports Dashboards Actions Contacts Files Weekly Metrics Custom History

Employee Fitness Record

Edit Delete Enroll in Wellness Plan Conduct Employee Visit HELP! Blood Pressure Quick Entry

Missed Visit per Contract Count

Ship Name  
Celebrity Equinox

New Visit Checkbox

Personal Demographic and Employment Data

Date of Birth  
1/23/1992

Age  
31

Gender  
Male

Nationality  
Philippines

Date of Hire  
9/4/2015

Position Name  
Utility Cleaner

CM Department  
Food Production

Assignment Start Date  
6/18/2022

Assignment End Date  
2/18/2023

Contract Length  
245

V000026032  
Category of Visit: Varicose Veins  
Status: Scheduled  
Record Type: Scheduled Visit

V000025582  
Category of Visit: Diabetes;Varicose Veins  
Status: Complete  
Record Type: AdHoc Visit

View All

Latest Visit Data

BMI  
28.00

BMI - Date Last Updated  
9/8/2022

Cholesterol mg/dl

Cholesterol mg/dl - Date Last Updated

Blood pressure SYSTOLIC  
120

Blood pressure SYST - Date Last Updated  
9/8/2022

Blood pressure DIASTOLIC  
80

Blood pressure DIAS - Date Last Updated  
9/8/2022

System Information

Hypertension Monitoring Panel

Hypertension Confirmed Grading  
Elevated Risk

Blood Pressure Status

Blood Pressure Review Report

Sum of Blood pressure SYSTOLIC Sum

Measure

Sum of Blood pressure SYSTOLIC

Sum of Blood pressure DIASTOLIC

7/29/2022 8/21/2022 9/8/2022

Date Visit Completed

View Report

As of Today at 12:14 PM

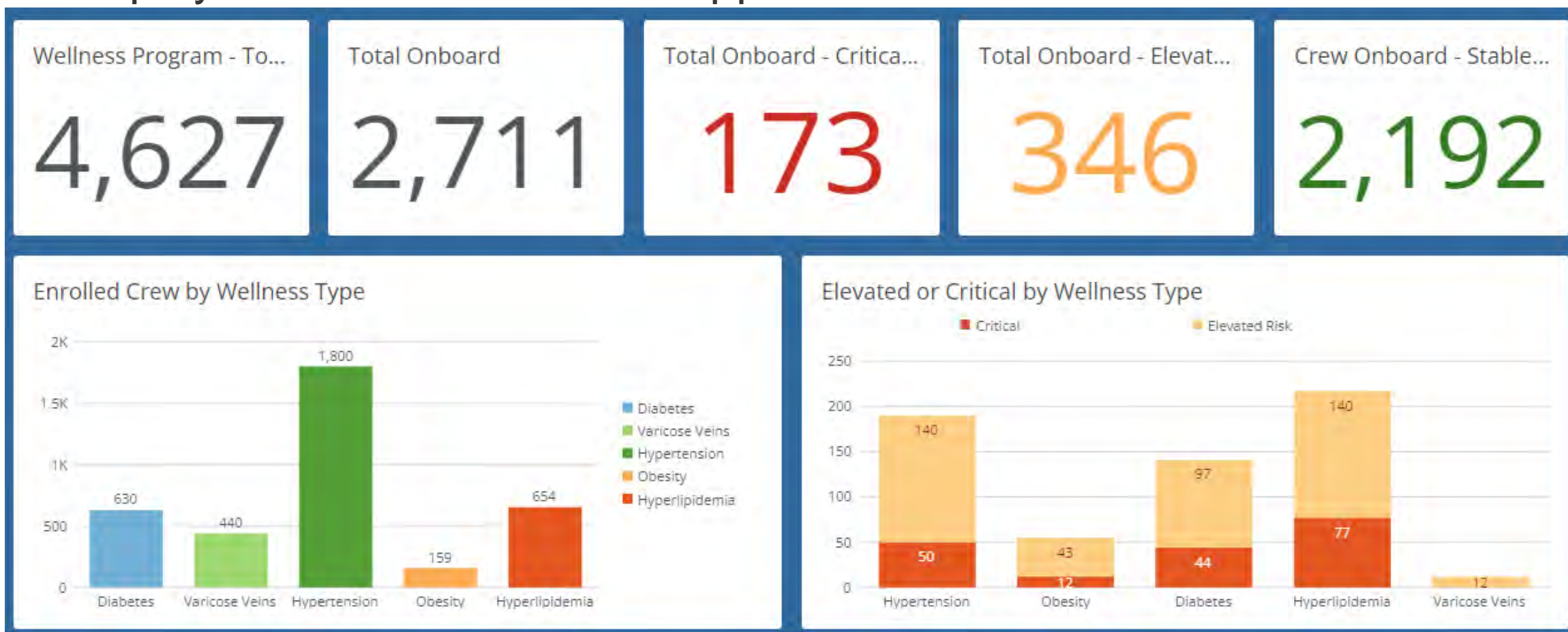
Varicose Veins Monitoring Panel

Varicose Veins Confirmed Grading  
Stable

Chatter Feed Recent Items

# Wellness Program and Riskonnect

## ■ Employee Health & Wellness Application – Wellness Dashboard





**WE'VE COME A LONG WAY...**

*and there's so much more we can do!*





# Questions?



erm • project risk mgmt • bcr • health & safety • rmis • claims admin • esg • irpm • compliance • policy mgmt • internal audit

DISCOVER

**RISK** UNDER  
ONE **ROOF**

Confidential



A man is surfing on a blue wave. The background is a vibrant sunset sky with shades of orange, pink, and purple. The text "COME SEEK" is overlaid in large white letters, with a crown and anchor logo replacing the letter 'E'.

# COME SEEK

THE *Royal* CARIBBEAN





# Connect with me.

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Carlos Junquera